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MANAGEMENT in FAMILY LIVING

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in FAMILY & LIVING

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TO OUR PARENTS

Luther Urban Nickell

Lena Wheeler Nickell

Robert James Watt Muir

Julia Fuller Muir

Preface

THIS THIRD EDITION of *Management in Family Living* presents a reorganization and reorientation of the material that appeared in the previous edition, together with much new material. Effort has been made to bring focus upon management situations as they are faced by individuals and families, then lead on to discussions of ways of analyzing and meeting them. The discussion in Part One, "The Place of Management in Homemaking and Family Living," moves immediately into family management responsibilities and shows how the interrelating of the family's philosophy, values, and goals influences decision-making. As in previous editions, the chapters on management reflect the thinking of workers in the field of home management as to the way management functions in family living. The chapters on time and energy management include findings from the most recent studies in that field. The parts on housing management and other management responsibilities carried by the modern family have been thoroughly revised and presented in light of current problems. Those on finance management discuss problems confronted by families in their day-by-day operation in our exchange economy. Data on income and expenditures have been placed together in the Appendix for easy reference.

To Marie Budolfson, Professor of Home Management in

charge of the Home Management House program at the Iowa State College, who has collaborated in planning the revisions, has read the manuscript during the writing, and has given invaluable aid in the general preparation of the material, special acknowledgment is due. Her suggestions, growing out of extensive experience in the use of the text, have led to changes that we feel will be of substantial help both to teachers and to students.

To Miss Florence Lloyd, Ohio State University, and Miss Mabel Stoner, Carnegie Institute of Technology, we are indebted for a complete critical reading of the manuscript and a number of very useful suggestions resulting therefrom. For extensive editorial clarifications we are indebted to Anna C. Glover, formerly on the editorial staff of the University of Illinois; and for helpful revisions in the section on health and recreation we gratefully acknowledge the assistance of Miss Agnes Doster.

With all its changes, the book attempts to fulfill its original objective, namely: to present a study of (1) management responsibilities and the development of a method of analyzing and meeting them in family living; (2) the place of management in homemaking and family life; and (3) the contribution of management in the democratic home to the development of the socially adjusted individual.

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Contents

Part 1 The Place of Management in Homemaking and Family Life

1	MAJOR HOME AND FAMILY RESPONSIBILITIES	2
2	PHILOSOPHY, VALUES, DECISION-MAKING, AND GOALS	17
3	MANAGEMENT AND ITS CONTRIBUTION	35
4	EVALUATION OF MANAGEMENT IN THE HOME	57
5	HOME AND FAMILY LIFE IN A CHANGING WORLD	72

Part 2 Time and Energy Management in Homemaking

6	TIME MANAGEMENT	100
7	ENERGY MANAGEMENT	128
8	WORK SIMPLIFICATION IN TIME AND ENERGY MANAGEMENT	155
9	HOMEMAKING SKILLS IN TIME AND ENERGY MANAGEMENT	195

Part 3 Family Finance Management

10	MANAGING FAMILY INCOME	208
11	A FAMILY'S SAVINGS, INVESTMENTS, AND ESTATE	<u>239</u>
12	LIFE INSURANCE FOR THE FAMILY	<u>265</u>
13	THE FAMILY LOOKS AT CREDIT	284
14	RECORDS AS AN AID IN FAMILY FINANCE	312

Part 4 Family Housing Management

15	MANAGING HOUSING	334
16	PLANNING AND BUILDING A HOUSE	<u>359</u>
17	SELECTING FURNISHINGS AND EQUIPMENT	406

Part 5 Other Managerial Responsibilities in Family Living

18	MANAGEMENT OF THE HOUSEHOLD AND FAMILY TRANSPORTATION	430
19	FOOD MANAGEMENT	448
20	CLOTHING MANAGEMENT	466
21	FAMILY HEALTH AND RECREATION MANAGEMENT	483

	APPENDIX	509
--	----------	-----

	INDEX	535
--	-------	-----

PART I *The Place of Management in
Homemaking and Family Life*

I

Major Home and Family Responsibilities

PROBABLY NO PROFESSION calls for such varied talents and involves so many kinds of responsibilities as does successful homemaking. But it is also true that to most women no other career brings such deep satisfactions. As children, watching our mothers, feeling their care, their guidance and discipline, we took their contribution to our lives completely for granted, as was natural. As adults, we wonder at their accomplishments. As young women entering the years when homemaking may become our role in life, we seek to understand it.

What, we may ask, are the responsibilities that men and women assume when they undertake to establish their homes? Broadly speaking, they may be placed in five groups:

1. Those having to do with the working out of a satisfying philosophy of family living and the formulation of attainable family goals.
2. Those associated with the growth and development of the individual members of the family, adults as well as children.
3. Those centering around management, that is, the solving of problems and the making of decisions.
4. Those involving the physical activities of homemaking and family life.
5. Those related to the family's interest and participation in local and national affairs.

These groups, as will be readily recognized, are not mutually exclusive. The responsibilities they include are interrelated and interdependent and are carried concurrently as a part of every homemaker's day. Many are shared by both parents; some are shared with the younger children as they grow and take their separate places in the life of the family; others are carried by the older children or by adults other than the parents residing in the home. However, because of the number of decisions that must constantly be made in the course of each day, and the countless tasks that must be done, it is to the mother, or whoever stands in the role of homemaker, that the responsibility for the management of the home and the actual work of the household largely falls. The precise nature of many of these responsibilities will, of course, vary among individual families and will be determined not only by the activities and events taking place within the home, but also by the extent to which the family participates in activities outside the home.

‘ In order to do her part in carrying these varied responsibilities, a woman needs a fund of specialized knowledge, broadened experience, the capacity for sustained mental and physical activity, the ability to work with and direct others (guidance skill), the ability to work with ideas (managerial skill), and the ability to work with tools and materials (technical skill).’

With this brief introduction we are ready to consider in some detail each of the five groups of responsibilities involved in the role of homemaker.

Development of a Philosophy

The building of family life begins with the choice of the person one marries and continues until the family is dissolved.

Each new home operates around a core of feelings and sets of patterns and habits for meeting life's situations that have been learned by the two homemakers in their parental families and elsewhere, and each new home is evolved in a slightly different social setting and atmosphere. Out of these experiences grow the new family's philosophy that is to serve it as a guide in meeting new situations. The young homemakers who take time be-

4 • *Management in Family Living*

fore marriage and during the first weeks and months of their married life to discuss and understand each other's values and their attitudes toward parenthood and homemaking responsibilities will lay the foundations for a sound and growing philosophy of homemaking and family living.

The over-all philosophy thus developed will determine the goals the two homemakers will consider important. Some of them will have been formulated before marriage; some will be achieved early in marriage; others will change as plans fail to be realized; and new goals will be devised as situations shift and as new members are added to the family group.

To be a strong motivating force in building family life, goals need to be definite and reasonably attainable and to appeal vitally to the family. If any one of these qualities is lacking, group action will not have the clear-cut direction it needs, and frustration or conflict and even disorganization may result. (For more detailed discussion of philosophy and goals see Chapter 2.)

Growth and Development of Family Members

The family is by its nature the best medium yet evolved for preparing the immature for social maturity. Successful family building requires affection and sound and mature judgment in the approach to and the handling of problems of human relations in the home. It also requires a degree of economic security and a willingness on the part of the homemakers to keep on learning in order to meet the new problems that come with each stage of family life.

Building well for family life is building for a better social order. In many ways the home is a miniature state. Usually, it is made up of individuals of different ages, different sexes, different interests, and different attitudes toward life. Personality adjustments, because of these differences, must constantly be made. Learning to make these adjustments is good education for citizenship. Conversely, whatever is done outside the home to make better citizens builds habits, ideals, and attitudes that will be felt within the home.

A view of the family's life cycle, from its beginning to its end,

assuming there are no breaks, reveals definite and discernible phases, or stages. These stages tend to overlap, yet each has its own clearly defined situations and problems. In the earlier stages, only the two persons starting the new home are concerned. For the family with a child or children, the needs of the growing children and the family's place in the community are of paramount importance. During these stages family demands often compete with the personal desires of the adults, and can thus cause conflicts or frustrations. If the adults have developed a philosophy that gives direction to the life of the family as a whole, adjustments can be made with less strain and conflicts are more easily resolved.

Where there are children, the family cycle may be divided into seven stages; in the family without children five stages are normal. With each stage specific relationship problems develop

STAGES IN THE FAMILY LIFE CYCLE *

Family with Children	Family without Children
1. Adjustment	1. Adjustment
2. Accumulation	2. Accumulation
3. Grade school	3. Early years of married life
4. High school	4. Middle years of married life
5. College	5. Retirement
6. Recovery or rediscovery	
7. Retirement	

* In the materials prepared for the Family Life Conference held in Washington, D. C., in May, 1948, the family life cycle was divided into three stages, namely Beginning or Founding, Expanding, and Contracting.

which demand the making of decisions and adjustments and call for the use of many types of information.

The first stage is one of *adjustment*. This may be called the "getting-acquainted" stage, when the two partners in the enterprise are learning to know each other. It begins during courtship and may extend into marriage for a short or a long period, depending upon the personalities of the two people.

The relationship during the engagement period has much to

6 • *Management in Family Living*

do with the smoothness of the first stage of married life. Its importance is frequently overlooked both by young people and by adults, though the increasing interest of high school and college students in courses, forums, and discussion groups on marriage and human relationships shows their growing desire for more adequate preparation for marriage and family life.

Many young people realize, even earlier than the marriage vows, that each individual has some responsibility for adjustment. When there is a clear understanding of this fact before marriage, this first phase of family life is, of course, made much easier.¹

The second stage in the family cycle is one of *accumulation*. This is marked by a change in and development of attitudes that direct future living, by the acquisition of children, and by accumulation of goods. Although the children at this time are usually under school age, in families where there are several children this stage frequently overlaps some of the later stages of parenthood.

During this period parents will find it necessary to make adjustments in their relationships to each other and to the children. The care and needs of the children will dominate the thought and attention of the parents. Opportunities for recreational activities and for participation in family group activities will need to be provided for them.

The third or *grade-school* stage begins a series of overlapping stages which cover the time when the children are about 6 to 12 years of age. It is the time when the children begin their formal education and make their first independent contacts with the outside world. During this period parents are concerned primarily with the educational and health needs of the children, with establishing an environment in which the children will have a feeling of belonging, with providing nutritious food, suitable clothing, and adequate housing for personal development, as well as social and community contacts outside the home. It is also important for children to be included in the family planning, where many things can be discussed in a friendly atmosphere. Allowances and family budgeting, ways the family can

¹ Lemo D. Rockwood and Mary E. N. Ford, *Youth, Marriage, and Parenthood*, New York: John Wiley and Sons, 1945, pp. 1-3.

best entertain their friends, and the use of the car or cars are some of the problems that can be shared by children and parents.

The fourth or *high-school* stage in the family cycle includes the period when the children are 12 to 17 or 18 years of age. The parents are now occupied with helping the children through high school, vocational, or trade school, assisting them to solve their personality, social, recreational, and vocational problems, and aiding them to become independent and self-sufficient individuals. { A

The *college* or fifth stage covers the time when the children are over 18 years of age and are either in college or starting work. The chief parental responsibilities now are helping the children through college or helping them to become established in suitable vocations. The parents' assistance may also be needed by the children in their social and vocational problems that arise before, and sometimes after, they are married and have homes of their own.

The sixth stage, that of *recovery* or *rediscovery*, comes when the children are completely independent, or nearly so, and the parents are still young enough to have active interests of their own. This is the period when a homemaker needs to *recover*, or *rediscover*, an absorbing interest beyond the children, and when the children need to be encouraged to develop creative interests for themselves. One woman who had been interested in dramatics throughout her youth and married life revived an active interest in the theater when her children became independent, and in a few years became a successful character actress. Similarly, women with such professional interests as writing, painting, teaching, or music, often return to their work. For the large group of homemakers who had no profession before marriage, the community in which they live offers many opportunities for interesting and creative experiences. Church organizations, civic and welfare groups, clubs, and adult study courses furnish such opportunities.

This stage also calls for social and vocational adjustments looking to old age.¹ If people are to have a feeling of adequacy and independence in their later years, they must plan for it before

8 • *Management in Family Living*

those years come.² During the rediscovery stage, creative avocational experiences and arts can be developed that will be useful when strength, health, and mental and physical abilities call for restricted activity. Fortunately, interest and judgment are two characteristics that increase rather than decrease with age.³ By alternating the use of the mind, as in reading, with some type of handwork or art, one can retain or develop a feeling of fulfillment and adequacy despite one's age.

The seventh stage is the period of *retirement*. The wants of individuals during this stage grow less intense, and the need for care and protection increases. It is a period of adjustment to physical changes, to changes in environmental conditions, and to changes in human relations. For those who can make the necessary adjustments and who have health and strength, human relations will continue to be satisfying even though the physical setting of the home may change. This is the period when avocational arts are important both to the family and to the aged person.

Management of the Home

Home management is the natural outgrowth of human association in the home environment. As soon as the family is established and persons begin working together for a common purpose, the need arises for the development of a plan of action, for the delegation of responsibility, and for organizing and controlling the use of the human and material resources of the home. Because of the multiplicity of the problems that must constantly be solved and the decisions that must be made, management becomes one of the major responsibilities in family living.

Two Concepts of Management

Some think of home management as concerned primarily with the development of skills, with standardizing tasks, with the choice of tools and equipment used in performing the tasks, and with mechanical efficiency. Efficiency and standardization in this

² George Lawton, *New Goals for Old Age*, New York: Columbia University Press, 1943, Prologue, pp. v-vii.

³ *Ibid.*, pp. 11-13.

concept are measured in units of family resources, such as time, energy, and money. Such a view places emphasis in home management upon perfectionist standards and upon efficiency as an end in itself instead of a means to an end.

Others look upon management as a way of life. They see the home as made up of human beings living together in an environment of love and affection and predominately concerned with the quality of human association. In this concept management becomes a means of using resources for the attainment of family goals. Efficiency is measured in terms of sound standards and how the use of resources affects individual development and family living. /

Efficiency in terms of human values is illustrated by the adjustment of one's standard of management to the necessities of a given situation. "Even within one home there may be different standards at different times. This is shown by one homemaker who said: 'There are three kinds of dusting: one where you dust every single thing and every crack and corner; one where you dust only what shows most, as the top of the piano and tabletops; and a third kind where you just draw the shades.' " *

There can be little doubt that "drawing the shades" at times will be the most efficient method to use. It is quite as important that a homemaker know when to draw the shades and be willing to do it, as it is that she know how to dust in the most efficient manner.

Which method to use, and when to use it, will depend upon the family's concept of home management.

Managerial Responsibilities

The managerial responsibilities in family living center, in the main, around the following duties assumed in some degree by all homemakers.

Guiding the family toward the development of a sound philosophy of life.

Guiding personal relationships into channels that are wholesome and satisfying.

* Mildred Weigley Wood, Ruth Lindquist, and Lucy Studley, *Managing the Home*, Boston: Houghton Mifflin Company, 1932, p. 44.

10 • *Management in Family Living*

Planning the use of one's time and energy in such ways as will get work done and the demands of living fulfilled.

Planning for and guiding the family financing in its many and diverse aspects.

Planning for and supplying housing to fit family needs.

Planning for and directing the purchase of equipment and furnishings.

Planning for and providing nutritious food and suitable clothing for the family.

Planning and controlling the operation and maintenance of the home.

Planning for and helping to maintain the health of members of the family.

Planning for and guiding the educational and social development of the individuals in the family group.

Planning for participation in community activities as good citizens, and guiding family members toward an awareness of state, national, and world problems.

An analysis of these managerial responsibilities shows many interrelationships. Some responsibilities are the direct outgrowth of others and as such are conditioned by them. Family finances, and their management, for instance, touch all phases of family life since they influence the desires of all family members, their decisions and choices, and in a large measure control what they can have and can do throughout their entire life. In planning for clothing one must first consider the family's financial resources and decide on the most suitable ways to fulfill the desires and needs with the money available. The management of time and work is also closely related to other management responsibilities. In order to accomplish each day's work without undue strain and tension, a homemaker must constantly think of each managerial responsibility and its related tasks in terms of the time and effort required for their accomplishment.

For the person beginning the study of management, the detailed analysis of the managerial responsibilities in family living which follow throughout this book, may seem ponderous and unreal. Many will argue that no family or person will stop to analyze every action in the management of their affairs. There is an element of truth in this argument. The point is, however,

that only through careful study of the mental and physical processes that come into play in the administration of the home can we get a clear understanding of what the undertaking calls for, with all its potential frustrations and its many and deep satisfactions. The discussion of management in Chapter 3 will show that as soon as one *learns to analyze carefully*, the process is not so time-consuming. Many decisions are made more or less automatically as one passes from one situation to another. Thoughtful analysis and decision-making in the earlier stages of homemaking may be the bases for later decisions.

Physical Activities in the Modern Home

Management and the direction of physical activities in the home are an inseparable part of the building of family life, since the basic needs of life—affection, respect, security, and experience—cannot be supplied unless management and work go hand in hand. The problems of family building are concerned mainly with ways of meeting human needs and with fostering conditions favorable to the development of satisfying human relations both at home and in the community.

Physical activity is a part of all living. The physical work that must be carried on makes up the technological aspects of homemaking. It includes the use of tools and equipment and the processes and effort by which the family carries on its daily life.

Kinds of Physical Activities

The physical activities of homemaking may be classified as follows:

Physical work in caring for and in training children.

Purchasing, preparing, serving, caring for, storing, refrigerating, and preserving food.

Cleaning, care, and upkeep of the house, including care of fires and disposal of waste.

Purchasing, making, repairing, laundering, cleaning, and storing clothing.

Purchasing, constructing, repairing, and cleaning equipment and furnishings.

12 • *Management in Family Living*

Care of the house surroundings, the car and garage, workshop, yard, and garden.

Work in connection with finance management, such as banking and the keeping of accounts and paying of bills.

Some homemakers must do all the work connected with home-making, depending only on occasional help from the family. In some homes all members of the family share in the work. Some homemakers can choose what and how much they will do because it is possible for them to employ outside help or services of various kinds. Some do none of the actual work in the home, but must be able to direct and guide the work of others. Homemakers living on higher incomes and many of those who are employed outside the home are of this last group.

All work requires the expenditure of human energy. Planning, which is an integral part of all purposive work, involves mental activity. The execution of plans requires both mental and physical activity as well as knowledge, experience, and technical skill. In carrying out plans, thinking and doing activities flow along together and usually are so interconnected that one cannot be separated from the other. The skillful performance of tasks calls for close coordination of manipulation with one's powers of thinking and planning. The homemaker is continually testing her thinking in her work and in the results. In this way she develops managerial and manipulative skills and gains new knowledge and experience.

How to do all the work that must be done each day without too great an expenditure of time and energy, with the fatigue that inevitably results, is one of the major problems in homemaking.

Because all work involves the use of the body and the mind, as well as many kinds of tools and materials, the methods of meeting work demands and solving work problems in the home are a vital part of management and the building of family life. In any method chosen, the family's interest, cooperation, and help are needed both in making plans and in carrying them to successful completion. Planning, which is a counterpart of all work, recognizes the goals, fashions mental pictures of how those goals may be achieved, and helps in carrying the work forward. How effectively a homemaker is able to use her time and energy in

the performance of homemaking activities will depend on her ability to adjust to and to control the different forces in family life which affect her time- and energy-spending patterns.

Role of Technology in Family Living

Although technology is often thought of as associated only with present-day living, in reality it has been a product of man's efforts, down through the ages, to control the forces of his environment. Spengler refers to this struggle for control as "man's technics in the tactics of living."⁵ Early man lived his own life, made his own weapons and tools, and followed his own tactics in the daily struggle. All his tools were fashioned, according to his own skill and his own reasoning, to be used in purposive activity.

In our highly industrialized world the situation is completely changed. Men, instead of living and working alone, live and do things collectively. They have become more and more dependent upon each other and upon machines to do the work. The tools that were formerly made in the home are now made outside by many different people and in many places. Today, instead of being the producers, men and their families have become the consumers of an ever-increasing array of technological equipment and products.

As technology has gone forward, living and homemaking activities have changed markedly. Some activities are no longer carried on in the home, while many others have been changed and made easier by means of new equipment and materials that are constantly being developed. The availability of electricity is responsible for many of these changes. Automatic laundry equipment, refrigerators, food freezers, dishwashers, garbage disposers, cleaning equipment, and many other types of small electrical equipment have become the new servants in the home.

Participation in Local and World Affairs

Family building that is interested only in the life of the family itself is not fulfilling its complete social obligation. The modern home is quickly affected by forces outside its immediate

⁵ Oswald Spengler, *Man and Technics*, New York: Alfred A. Knopf, 1932, p. 10.

boundaries and in turn has a definite influence upon the larger groups—on neighborhood, city, state, and nation, and on other countries as well.

The responsibility for building personalities that will become a creative part of the cooperative endeavors in a community rests squarely upon the home and becomes one of the chief responsibilities of parenthood. The task of serving the community in which a family lives lies in building in the minds of family members attitudes for understanding the affairs of the community and developing an interest in them, of preparing and sending out citizens who will work for justice and the best social values in the community.

Attitudes about social responsibilities and social justice are learned first in the home. The beginnings of these learnings stem from the quality of personal relationships evidenced there between the two parents, between parents and children, and from attitudes expressed by members of the family, particularly by the father and mother. The father's attitude toward the mother's work and her contribution to the home, his attitude toward wise and unwise or just and unjust treatment of social issues, the mother's attitude about her place and voice as a citizen, and the joint attitude of father and mother about the child's responsibility to and participation in group and community affairs all help to form the foundation for a young person's attitude pattern. Attitudes about self and others and about social groups arise from attitudes held in the home. These, together with the way a family acts, determine the approach of children to living and working with people. Part of learning to work with people is learning the techniques of democratic procedure. Because of its intimate nature, the home is a favorable environment in which to learn how to share ideas as well as resources and experiences.

Misunderstandings, rivalries, and prejudices all lead to social conflicts. Attitudes toward these problems must be grappled with in the home as well as in the community and in the nation. The selection of capable and honest public officials, the formulation of what seem to be wise local and national policies, and other steps in intelligent social action all demand consideration

and understanding in the modern home if we are to have citizens who are equal to the needs of our democracy.

The job of citizenship is for all, but women as wives and mothers, as teachers and friends of young people, have a special part in it.

Working with others in undertakings of common interest bigger than self or family not only gives personal satisfaction but also enriches the lives of family members. Families are frequently inactive in community affairs because, its members say, "What I do is so small." But it should be remembered that satisfaction comes from gradual improvement and the cumulative effect of the action of many families. Indeed an important principle to learn when working on a common cooperative project outside the home is to be satisfied with gains even though they be small and gradual. Overzealous persons, not satisfied with the pace of a slow-moving group, often work too fast and an important enterprise fails or its accomplishment is delayed. Personal and group frustration, as well as the loss of a cause, may result.

The home that helps its members mature naturally, to become aware of their social responsibilities, and to develop creative cooperative attitudes gives richly to the community.

Additional References

- Becker, Howard, and Reuben Hill, *Family, Marriage and Parenthood*, Boston: D. C. Heath and Company, 1955, Chapters 1, 2, and 13.
- Bonde, Ruth, *Management in Daily Living*, New York: The Macmillan Company, 1944, Chapter 6.
- Cavan, Ruth Shonle, *The American Family*, New York: Thomas Y. Crowell Company, Fifth Printing, 1956, Part 3, The Cycle of Family Life, pp. 216-572.
- Cavan, Ruth Shonle, *American Marriage, A Way of Life*, New York: Thomas Y. Crowell Company, 1959.
- Cushman, Ella M., *Management in Homes*, New York: The Macmillan Company, 1945.
- Duvall, Evelyn Millis, *Family Development*, New York: J. B. Lippincott Company, 1957. Family life cycle.
- Fitzsimmons, Cleo, *The Management of Family Resources*, San Francisco: W. H. Freeman and Company, 1950.
- Gilbreth, Lillian M., Orpha Mae Thomas, and Eleanor Clymer, *Management in the Home*, New York: The Macmillan Company, 1955.

16 • *Management in Family Living*

- Glick, Paul C., "The Life Cycle of the Family," *Marriage and Family Living*, Vol. XVII (February, 1955), pp. 3-9.
- Glick, Paul C., *American Families*, New York: John Wiley and Sons, 1957, Chapters 3, 4, 5.
- Gross, Irma H., and Elizabeth Walbert Crandall, *Management for Modern Families*, New York: Appleton-Century-Crofts, 1954.
- Harmon, Louise, "Keeping Up To Date," *Journal of Home Economics*, Vol. 50 (January, 1958), pp. 9-11.
- Lansing, John B., and Leslie Kish, "Family Life Cycle as an Independent Variable," *Am. Sociol. Rev.* 22, No. 5 (October, 1957), pp. 512-518.
- Martinson, Floyd, *Marriage and the American Ideal*, New York: Dodd, Mead and Company, 1960.
- Ryan, Thomas Arthur, *Work and Effort*, New York: Ronald Press Company, 1947, Chapter 2.
- Starr, Mary Catherine, *Management for Better Living*, Boston: D. C. Heath and Company, 1956, Part I.
- Veblen, Thorstein, *The Instinct of Workmanship*, New York: The Macmillan Company, 1914, Chapters 1 and 2.



2

Philosophy, Values, Decision-Making, and Goals

THERE ARE AS MANY WAYS of meeting life as there are men and women; these ways are always changing. There are as many philosophies of homemaking as there are men and women homemakers; these philosophies change and broaden as life is enriched by knowledge and experience.

A philosophy is a point of view or outlook upon life which guides the behavior of the individual or the group. Every normal person has some philosophy of life although he may not think of it as such. Some persons are able to develop their philosophy out of their own experiences in dealing with the problems of life; others willingly accept a ready-made philosophy imposed by traditions and customs; still others drift along the line of least resistance or accept a point of view through force of circumstances.

Thus it will be seen that the philosophy of each family is determined largely by the native dispositions of the two homemakers, their total experiences, educational backgrounds, habits, and physical and social heritage. In a large majority of families, a philosophy is a gradual, unconscious development.

Importance of a Philosophy

A philosophy is important to the family because it gives meaning to the life, thoughts, feelings, and experiences of all its members. It helps them to learn how to live and to see life as a whole. It conditions the quality of human relationships, the choice of surroundings, family interests, and even the selection of life's occupation or profession.

More specifically, a philosophy (1) forms a guide to the conduct of both the individual members of the family and the family group; (2) becomes the basis for giving all members a feeling of completeness and unity in family endeavors; and (3) helps develop criteria for judgments in making choices and decisions. In fact, it might be called a judgment yardstick. From this philosophy grow the goals for homemaking and family life. Many of the goals stretch out into the remote future; some are destined for immediate attainment. Far or near, they act as stimuli to human behavior, motivating and conditioning the life of the individual and the group.

Homemaking is that part of human experience that centers around life with another individual or with a group of individuals in a home. This experience in family living consists of the sharing of resources in common, the developing of individual personalities, the attaining of satisfactions through shared work and experiences, and the contributing to and taking part in the social responsibilities that make up the societal setting of the family. The experiences of the individual in the intimate family group condition and influence the manner in which social responsibilities are approached and carried out. They also set the tone for the individual's adjustment to and participation in the community and in world affairs, both as a child and young adult, and later as an older adult.

Since the goals of each family, as well as their methods of attaining these goals, are to a large extent determined by the family's philosophy, we need to know something of the source and growth of that philosophy.

Growth of a Philosophy in Home and Family Life

An individual's philosophy is developed through experience. Experiences are not isolated bits of living, but are events woven together and forming the basic fabric of life. In the home they cluster around the major activity-interests, such as the business of making a living, recreation and fun, management of resources, and school activities. These become centers of experiences that overlap and are integrated into a pattern of living. Out of such experiences grow the knowledge and skills and the attitudes that guide future thought and action.

Attitudes Are Directive

With every experience, a person acts favorably or unfavorably to the things and situations confronting him, and from these interactions arise attitudes that have directive force in living.

According to Thomson, "Attitude may be regarded as a composite of . . . heredity, experience, and present purpose. It is a conscious set or readiness of the mind to react to stimulus in a given way."¹

Thurstone and Chave define attitude (in connection with their study of the measurement of attitudes) as the sum total of a man's inclinations and feelings, prejudices and bias, preconceived notions, ideas, fears, threats, and convictions about any topic.²

Salisbury, in analyzing attitudes as directive factors in mental activity, points out that every experience is relational and dynamic in nature, and that it is utterly impossible to think of ourselves without the accompanying aspects of dynamic relations, which we call attitudes.³

Every person has his own characteristic approach to life and the world in which he lives. He may be happy or unhappy; interested in life or discontented with life; anxious to accom-

¹ M. K. Thomson, *The Springs of Human Action*, New York: D. Appleton Company, 1927, p. 166.

² L. L. Thurstone and E. J. Chave, *The Measurement of Attitude*, Chicago: University of Chicago Press, 1929, pp. 6-7.

³ Frank Seely Salisbury, *Human Development and Learning*, New York: McGraw-Hill Book Company, 1939, p. 302.

plish certain goals or satisfied to drift along aimlessly; or his attitudes may be somewhere between these extremes. Each person displays different attitudes or series of attitudes at different times. As an individual matures, the attitudes that have been learned and built up through experience form a guiding point of view for living.

When a home is started, two sets of attitudes exist—those of the two individuals establishing the home. From these will arise a third or shared set of attitudes. The individual attitudes are the outgrowth of past experience and the system of behavior or point of view of the family from which each has come. The shared or integrated attitudes are the result of the associations and relations of the individuals with each other. These three sets of attitudes form the beginnings of the new family's philosophy.

The home environment determines, to a large extent, the attitudes and ideals, the prejudices and emotional feelings of its members. Parents have a marked influence on the attitudes of their children through the types of stimulation they provide and through the examples of behavior they display before them. The attitudes of children and those of parents are surprisingly similar.

The modern family lives in a world of attitude-forming devices that originate outside the home and very often outside the community. The newspapers and magazines with their attractive and compelling advertisements, the radio with its convincing ways about all sorts of things, and television, which brings personalities, information, techniques, and products right into the home, are some of the greatest devices for attitude formation that we have ever known. New attitudes are being shaped by them in daily living in every home.

Motion pictures are having a marked effect on both children and older persons. Through the movies, both at home and outside, new knowledge is being gained, skills are being taught, emotions are being stimulated, attitudes are being formed, and manners and morals are being changed. In our present world, where members of every family are being bombarded with attitude-forming material, each one must learn to criticize and ana-

lyze and to distinguish between essentials and nonessentials.⁴ Such evaluation results in a growing and dynamic philosophy.

Human Values in Family Living

The possession of a wholesome philosophy by each of the heads of a family goes far toward enabling them to create a satisfying and successful home. It helps them to recognize the true values inherent in their common experiences and to build their own values of family living.

Values grow out of human interests and desires. They are the products of the interaction between an individual and some object or situation in his environment.^{5,6}

Parker, in answering the question, What is the value factor in experience? says, "The answer I would give is in essential accord with the type of theory that defines value in terms of interest and desire—value is satisfaction, the appeasing of desire. The primary argument for this identification is the fact that if one considers any experience accepted as containing value—any experience of beauty or enjoyment or insight or love—one always finds satisfaction there; and if one thinks away the satisfaction, one thinks away everything called value."⁷

We are thus dealing with a stimulus-response reaction. The value satisfaction from any object or situation is that quality that causes the individual to respond, or would cause the response if the two were brought together.^{8,9} *The human interests and desires that bring about this response, together with the atti-*

⁴ John E. Anderson, *The Psychology of Development and Personal Adjustment*, New York: Henry Holt and Company, 1949, pp. 283-311.

⁵ H. H. Titus, *Ethics for Today*, New York: American Book Company, 1936, p. 264.

⁶ Otis Lee, "Value and Interest," *Journal of Philosophy*, Vol. 42 (March, 1945), pp. 141-161.

⁷ DeWitt H. Parker, *Experience and Substance*, Ann Arbor: University of Michigan Press, 1941, p. 293.

⁸ W. H. Roberts, *The Problem of Choice*, Boston: Ginn and Company, 1941, p. 216.

⁹ Max Rosenberg, *Introduction to Philosophy*, New York: Philosophical Library, 1955, pp. 450-459.

tudinal patterns in family living that lead to the realization of the values in the home, are our concern here.

Human Values Examined

Values give meaning to life. They give direction through the importance we place on the objects and situations in daily living. Mumford says, "Man's chief purpose . . . is the creation and preservation of values: that is what gives meaning to our civilization, and the participation in this is what gives significance, ultimately, to the individual life."¹⁰

With each wish an individual pictures the thing he wants and judges it on the basis of the satisfaction anticipated. Throughout life we are continually passing judgment, either our own or someone else's, upon our experiences and the things we desire, calling them good or bad according to our own individual standards. Dewey and Tufts point out that "In its popular sense, *all* judgment is estimation, appraisal, assigning value to something; a discrimination as to advantage, serviceability, fitness for a purpose, enjoyability, and so on."¹¹

In choosing the course we shall pursue, the line of thought we shall take, the duties we shall perform, the goods and services we shall purchase or do without, we are constantly weighing values. Living is a continuous process of choice-making, of foregoing one value for another. Out of this life of choice—deciding and weighing the consequences—grows one's system of values, which as time goes on, is modified and changed with new experiences.

Flewelling¹² feels that all values are finally human in that they are created, evaluated, and enjoyed by persons. He further feels that values do not exist apart from the services, welfare, and gratification of human beings.

What are some of these human values which play such an important role in the lives of people?

¹⁰ Lewis Mumford, *Faith for Living*, New York: Harcourt, Brace and Company, 1940, p. 208.

¹¹ John Dewey and James H. Tufts, *Ethics*, New York: Henry Holt and Company, 1938, p. 290.

¹² Ralph Tyler Flewelling, *The Things That Matter Most*, New York: Ronald Press Company, 1946, p. 21.

The major values and interests, given by Parker,¹³ which govern human conduct are:

Love, the interest in relationships with people, in its broad sense and in its various forms, expressed as sex love, parental love, friendship, generic love (love for an individual of one's kind—mankind), community love (love for an organized group), and ideal love (love of the ascetic for his cause).

Health, the interest in physical and mental well-being.

Comfort, the interest in making life as pleasant and agreeable as possible.

Ambition, the interest or desire for success in life, for a victorious achievement.

Knowledge and wisdom, the interest in truth and its use in all activities in living (innate and learned).

Technological interest or efficiency in work, the interest in the efficient making and using of things and in skillful workmanship.

Play, the interest in creative imaginative activity.

Art, the interest in beauty in all forms of expression.

Religion, the interest in goodness and rightness in unifying all aims and purposes in living.

Values may be either intrinsic or instrumental. An intrinsic value is one that is important and desirable simply for its own sake.¹⁴ It is worthy of being sought for itself alone. Art, the interest in beauty, is an intrinsic value. The love of a man and woman or of father and son has beauty in human relationship. The sunset one pauses to admire at evening, the collections at the civic art center for all to enjoy, or the symphony listened to as the family reads around the fireplace on Sunday afternoon are all expressions of art and its intrinsic value in living. Beauty and esthetic experiences in all forms have merit in themselves and because of this quality stimulate artistic and creative activity.

An instrumental value is one that has fitness for something else and is a means to attaining other values¹⁵ of purely instrumental worth.

¹³ DeWitt H. Parker, *Human Values*, New York: Harper and Brothers, 1931, p. 46.

¹⁴ H. N. Wieman, "Intrinsic, Instrumental and Creative Values," *Journal of Philosophy*, Vol. 42 (March 29, 1945), pp. 180-185.

¹⁵ Roberts, *op. cit.*, pp. 226-227.

24 • *Management in Family Living*

Technological interest, or efficiency in work, has mainly instrumental value. It is sought primarily as a means to an end. Mass production in an industrialized society provides innumerable examples of the value of technological procedures. It leads to increased production and lowered costs and makes more commodities available for more people. The commodities and tools produced are primarily of instrumental worth, since they furnish an avenue for the attainment of other values. The technological interest stimulates the expansion of services and equipment for achieving *health*, for example; or *play*; or again, for desirable *comforts* in living.

Some values possess both intrinsic and instrumental worth. They are in some measure good in themselves and in some measure means to other values. The human values—love, health, comfort, ambition, knowledge and wisdom, play, art, and religion—are both intrinsic (important for their own sake) and instrumental (a means to attaining other values). All values are interdependent and intimately related, and help guide the conduct of personal and family living.

In homemaking, management is of instrumental value and in that sense is employed in using resources to attain ends or goals. These include both the human and material resources of the family which are used to satisfy both individual and family desires. The efficient management of these resources leads to the realization of all other values of life.

The values which two individuals share in starting a home and which they attempt to realize as members of a family and as parents of children are highly important, since they will determine the pattern of human relations within the home. In all homes the life of each individual is so interrelated with the lives of the others that the values which are held and sought by any member are reflected in some degree in the lives of the others.

How Attitudes Influence Values

How can a family be assured of having attitudes that implement and lead to values important in its life? Only by thoughtfully fostering such attitudes. *The creating of conditions that are favorable to the sharing and realizing of human values is one of*

the important roles of management in the home. Under favorable conditions attitudes can be deliberately developed both by parents and by other members of the family.

A suggested guide for analyzing and studying the important attitudes in family living is given on pages 26 and 27. Any homemaker or family can use this framework as a means of identifying those attitudes which are strong in the group, pointing up those that need strengthening or developing those that are lacking.

Values in Decision-Making

✓ Men and women in meeting their managerial problems in the home are constantly faced with situations that require decision and action. There are the small, routine, or repetitive decisions related to daily activities that make up a large share of decision-making. Many of these judgments are automatic because criteria are well-established and action can result almost immediately. On the other hand, there are big, important decisions in family life, some of which call for group action and deliberation and need more time and thought. For instance, the father's acceptance or rejection of a new position, the buying of a new family car, or a new bicycle, or the installation of a new furnace all require careful consideration.)

Seeking all the facts that are pertinent to a situation will help one who is faced with a decision to make a more rational judgment. A clear understanding of the situation is important. Such research as has been done on this subject would indicate, however, that the person who consistently makes good judgments has both a thorough knowledge of the situation and is endowed with an enviable art—the art of grasping relationships clearly, of clearly sensing the important values involved, and of being willing to follow through with the decision that seems best.

The Process of Decision-Making

✓ In the solution of any problem, homemaking or otherwise, the process of making decisions proceeds along definite lines. In approaching the problem we unconsciously and spontaneously make certain mental selections; we like one thing and dislike

HUMAN VALUES	ATTITUDES WHICH LEAD TO THE REALIZATION OF VALUES IN FAMILY LIVING
LOVE	<p>Recognition that understanding affection is fundamental in family living</p> <p>Recognition that free interchange of thoughts, feelings, and hopes is fundamental to group solidarity</p> <p>Appreciation that intelligent loyalty is based on justice and integrity</p> <p>Understanding that companionability and comradeship are essential to satisfying family relations</p> <p>Willingness to recognize the importance of a co-operative spirit in group relations</p> <p>Appreciation of the importance of sympathetic understanding and sharing of interest within the family and within the community</p>
KNOWLEDGE AND WISDOM	<p>Appreciation that knowledge of facts and relationships is essential for the realization of all other values</p> <p>Recognition of the importance of individual resourcefulness</p> <p>Understanding of the need for sound and fair judgment in dealing with practical situations in living</p> <p>Willingness to recognize the realities of life, face their implications, and intelligently resolve their conflicts</p> <p>Appreciation and understanding of the needs, interests, and individual differences of family members</p> <p>Appreciation of the importance of the natural growth and development of each member of the family</p> <p>Recognition of the need for increasing freedom as children grow to maturity</p>
ART	<p>Awareness and appreciation of beauty in its many forms</p> <p>Appreciation of the stimulation and the satisfaction which result from all esthetic experiences</p>

HUMAN VALUES (Cont.)	ATTITUDES WHICH LEAD TO THE REALIZATION OF VALUES IN FAMILY LIVING (Cont.)
HEALTH	<p>Appreciation that both physical and mental health are necessary for the full realization of all other values</p> <p>Understanding of the relationship between fatigue and mental and physical health</p> <p>Appreciation of the important part family living plays in the emotional security of individuals</p>
COMFORT	<p>Interest in using goods and services to make life as pleasant and agreeable as possible</p>
AMBITION	<p>Recognition that the desire to succeed is a major motivating factor in human accomplishments</p> <p>Recognition that the choice of work suited to capacities of the individual is a factor in success</p>
TECHNOLOGICAL INTEREST OR EFFICIENCY IN WORK	<p>Recognition of the importance of skill in purposeful activities</p> <p>Understanding of the pleasure and satisfaction in creative work and expression</p> <p>Appreciation of efficient management and work as a means to effective homemaking</p> <p>Appreciation of the importance of social and economic security</p> <p>Willingness to adjust to and enjoy the standard which income permits</p>
PLAY	<p>Recognition of the value of relaxation and freedom gained through creative imaginative activity</p> <p>Appreciation of the wise and constructive use of free time</p> <p>Appreciation of good sportsmanship</p>
RELIGION	<p>Recognition of the role religion plays in unifying an individual's aims and purposes in living</p> <p>Appreciation of the happiness and peace that religion provides</p>

another, or we may choose one thing and reject another. Preferences of this kind always precede judgment of comparative values.

When a choice must be made between two competing desires or wants, there is likely to be a period of doubt and hesitation in the mind of the choice-maker. This leads to deliberation, or the weighing of values, to discover and choose the better course under the given circumstances. Only through such deliberation can we decide which of the two conflicting things we want.¹⁶

Dewey and Tufts state that "Deliberation is actually an imaginative rehearsal of various courses of conduct. We give way, *in our mind*, to some impulse; we try, *in our mind*, some plan. Following its career through various steps, we find ourselves in imagination in the presence of the consequences that would follow: and as we then like and approve, or dislike and disapprove, these consequences, we find the original impulse or plan good or bad. . . . The advantage of a mental trial, prior to the overt trial (for the act after all is itself a trial, a proving of the idea that lies back of it), is that it is retrievable, whereas overt consequences remain. They cannot be recalled. Moreover, many trials may mentally be made in a short time."¹⁷

The choices and decisions that are made in the modern family have a widespread effect upon its members, in the physical, intellectual, and spiritual climate of the family, and on groups outside the immediate family. The amounts to be put into savings, the method of meeting the payment of taxes, and the family's use of credit, for example, are problems of finance which affect the total economy of the family. At the same time the decisions that are made in the use of current income markedly affect the wants and needs of the members of the group and their life together. Who in the family is responsible for the making of major decisions?¹⁸ It is generally agreed that the goals of the family and the values they hold dear will be attained and protected in better fashion if major decisions can be made by

¹⁶ Dewey and Tufts, *op. cit.*, pp. 316-317.

¹⁷ *Ibid.*, p. 303.

¹⁸ Elizabeth H. Wolgast, "Do Husbands or Wives Make the Purchasing Decisions?", *The Journal of Marketing*, Vol. 23, No. 2 (October, 1958), pp. 151-158.

the group instead of being left to the whims or the judgment of any one individual.

Depending upon the group, large or small, the making of decisions will always take time. It is often a struggle to reach a compromise of conflicting preferences, to integrate different points of view, and to arrive at a choice that will satisfy all. Although there will always be need for individual leadership or guidance, the chances for success will be far greater if the decisions on major issues can be group-organized and group-derived.

The act of decision-making, briefly stated, involves the defining of objectives; finding, comparing, and choosing the means to reach them; and the choosing of a course of action. The steps in this mental process are outlined here.

STEPS IN DECISION-MAKING *

Before making a decision, one makes a spontaneous mental selection: he prefers one thing to another; he weighs one alternative against another.

While one is trying to arrive at a decision, these conflicting preferences or alternatives hold each other in check. Hesitation delays the decision.

As the values to be derived from each course or choice are weighed and compared, hesitation becomes deliberation.

Finally a choice or preference emerges which is based on consciousness of the values that have been identified in the process of deliberating. The decision is then made.

* Adapted from Dewey and Tufts, *op. cit.*, pp. 316-317.

The thought process in decision-making involving the weighing of values will be understood more clearly when applied to a home situation.

The Black family needed a new range and planned to buy one early in the fall. In the meantime, Mrs. Black, an understanding mother, had observed that their only daughter, Betty, 15 years old, was unhappy. She was frequently moody and was neither interested in the activities of her girl friends nor in things around the home.

While talking over the situation, Mr. Black suggested that maybe Betty needed a change, since often that made a young person appreciate home and friends. He raised the question of delaying the purchase of the range in order to release the

money to send Betty on a trip to visit some cousins. This, he felt sure, would give Betty valuable new experiences and help her find herself, and thus change her attitudes about her friends and things at home.

After considerable discussion, the family decided to make plans for other less expensive experiences for Betty and to go forward with the planned purchase of the range. An analysis of the Black family's solution of their problem shows that the process of decision-making followed the steps outlined by the group.

When Mr. Black suggested a change in plans, preference arose spontaneously in the minds of both parents. The preferences were probably more intense in the mind of Mrs. Black, since she had the worry of using the old stove.

Hesitation was the result of the conflict in preferences, and no decision could immediately be reached. After Mr. and Mrs. Black talked over the situation, they discussed it with Betty. Together they weighed and compared the technological and health (safety) values that would be derived by all the family from the new range with the health, art, love, and play values which Betty might realize from her trip.

The deliberation led to the final decision which was to devise different ways and means of giving Betty equally rich experiences at less cost, thus leaving the money to buy the badly needed range.

Many situations in the home which call for deliberation and judgment have elements in common, and the values found in them resemble one another. Thus, experience gained in meeting one situation or problem may be helpful in making decisions regarding another. Out of this fund of experience, well-established habits of decision-making are gradually built up. These habits lead to rapid action and ultimately become the basis for value judgments. In this way one develops decision-making skill.

Goals for Homemaking and Family Living

The goals that are created and sought by young homemakers naturally grow out of their desires, their past environment and experiences, and the philosophies and attitudes about values that each brings to the new home. Young men and young women normally seek happiness and a satisfying pattern of personal living, both for themselves and for the children they hope to have. To attain these desires, many goals are set with the expectation that reaching them will result in a satisfying life.¹⁹ Some of these goals are quite definite; others less clear-cut. Some are the imaginings of youth and may not become real as life is experienced. Some are more, some less, impelling than others. Simply stated, goals are nothing more than the ends that any individual or family is willing to work for.

Formulating Goals

Goal-setting is a continual process. Throughout life each family is constantly weighing values and changing its attitudes about attainments and acquisitions. As a result, activities are directed toward seeking new ends or new methods of attaining established goals. In every home there are the personal goals of each member of the family as well as those shared in common by the group. A goal calls up mental pictures of something which the individual or family wants and will work to bring about. Many of these goals are immediately attainable. Some are held in view for attainment in the near future; others are sought over a long period of life and consequently are ever present.

The immediate and short-time goals that individuals seek throughout each day are numberless. Not all of these are equally important, and many are used only as a means of achieving other goals. For example, when a young homemaker is developing special skills, such as in cooking or efficient work habits; when she, together with her husband, is setting reason-

¹⁹ Mattie Pattison, *Implications for Education in the Relationship between Expressed Values of Certain Farm Families and Their Expenditures for Living*, unpublished doctor's thesis, University of Chicago, 1945, pp. 10-17.

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able and desirable standards of housekeeping and food service, she is working to attain both immediate and long-time goals. Her immediate aim is the mastering of herself in her work environment, while her long-time goals may be such things as developing the ability to prepare nourishing and attractive meals, or teaching the family that order in the house saves time and avoids tensions for everyone.

In starting a home it is important that the two homemakers formulate the goals they wish to attain and that will give them the greatest satisfactions. Clearly defined goals not only encourage the wise use of family resources, but they also stimulate the cooperation of the two people who have set the goals. The young homemakers who definitely save money in order that they may have their own home or a car usually achieve their objective. Those who only hope that some day they may have these things but do not plan and work to get them often fail to realize their desires. Young people who wish to have children early in their married life and begin to provide a fund for this purpose are usually ready to meet their financial obligations when the time comes. As the years go by, the family's goals help direct and control the desires of the group and thus shape the family's pattern of living.

Long-Time Goals

Although the goals of each family must of necessity differ in many respects from those of all other families, and the methods of attaining them vary markedly, there are a number of long-time goals that seem worthwhile for all families to seek.^{20, 21, 22, 23} These goals may be stated briefly as follows:

1. Good health for each member of the family.
2. Continuous development of each member of the family throughout life—physically, mentally, socially, and spiritually.

²⁰ "Minimum Essential Goals for Homemaking," *Journal of Home Economics*, Vol. 37 (March, 1945), p. 155.

²¹ "Fundamentals for Homemaking," prepared by the Homemaking Department, American Home Economics Association, 1946.

²² Hornell Hart and Ella B. Hart, *Personality and the Family*, Boston: D. C. Heath and Company, 1941, pp. 87-88.

²³ Irma H. Gross and Elizabeth Walbert Crandall, *Management for Modern Families*, New York: Appleton-Century-Crofts, 1954, Chapters 2 and 3.

3. Personal and family relationships that are satisfying.
4. Sufficient resources to ensure the health and welfare of members of the family and to provide educational and recreational advantages for each member.
5. Well-planned housing which meets the needs of the family and is conveniently located.
6. Individual and family participation in local and national affairs and an informed interest in world problems.
7. Management of the family resources to ensure attainment of the above goals.

The formulating and attaining of the family's goals call heavily on a homemaker's mental and physical resources. Knowledge is required, a positive philosophy, good judgment, and an understanding of the ways and means of using the family resources. Courage also is needed, as well as an abundance of energy and persistence in weighing values. *In modern living, planning the use of the family's resources and so managing them as to achieve what the family wants from life becomes a fundamental function of the homemaker and her family.*

Additional References

- Bahm, Archie J., "What Is Philosophy?" *The Scientific Monthly*, Vol. 52 (June, 1941), pp. 553-560.
- Bane, Lita, "Values That Count in Home Economics," *Journal of Home Economics*, Vol. 42 (January, 1950), pp. 13-15.
- Bonde, Ruth L., "What Goals Does the Family Want?" *Journal of Home Economics*, Vol. 42 (January, 1950), p. 26.
- Cochran, Willard W., and Carolyn Shaw Bell, *The Economics of Consumption: Economics of Decision Making in the Household*, New York: McGraw-Hill Book Company, 1956.
- Davis, Mildred Jena, *Decision-Making in Relation to the Performance of Household Activities in New York State Homes*, Cornell University, 1958.
- Gross, Irma H., and Elizabeth Walbert Crandall, *Management for Modern Families*, New York: Appleton-Century-Crofts, Chapter 3.
- Hill, Edna A., "Human Values in Home Economics," *Journal of Home Economics*, Vol. 47 (October, 1955), pp. 592-594.
- Johnson, Glenn L., and Cecil Haver, *Decision Making Principles in Farm Management*, Ky. Agr. Exp. Sta. Bul. 593, January, 1953.
- Mayo, Leonard W., "Strengthening Ethical and Spiritual Values in Family Life," *Journal of Home Economics*, Vol. 44 (October, 1952), pp. 613-615.

34 • *Management in Family Living*

- McDonald, John, "How Businessmen Make Decisions," *Fortune*, Vol. 42 (August, 1955), p. 84.
- Mockmore, Buena Maris, "Lasting Values in a Changing World," *Journal of Home Economics*, Vol. 50 (December, 1958), 751-754.
- Proceedings of Conference on Values and Decision-Making in Home Management, July, 1955. Department of Home Management and Child Development, Michigan State University, East Lansing.
- Richard, Max D., and William A. Nielander, *Readings in Management*, Cincinnati: South-Western Publishing Co., 1958, pp. 154-166.
- Rosenberg, Max, *Introduction to Philosophy*, New York: Philosophical Library, 1955, Chapter 1, pp. 450-459.
- Simon, Herbert A., *Behavior: A Study of Decision-Making Processes in Administrative Organization*, New York: The Macmillan Company, Second Edition, 1955.
- Stryker, Perrin, "Can Executives Be Taught To Think?" *Fortune*, Vol. 47 (May, 1953).
- Titus, Harold H., *Living Issues in Philosophy*, New York: American Book Company, 1951, Chapters 1 and 19.
- Tsanoff, Radoslav A., *Ethics*, New York: Harper and Brothers, 1955, Chapter 3.
- Van Bortel, Dorothy Greey, and Irma H. Gross, *A Comparison of Home Management in Two Socio-Economic Groups*, Mich. State College, Agr. Exp. Sta. Technical Bul. 240, 1954, pp. 18, 48-50.
- Williams, Robin, *American Society*, New York: Alfred A. Knopf, 1951, pp. 372-375.
- Woodworth, Robert S., and Donald G. Marquis, *Psychology*, New York: Henry Holt and Company, 1950, pp. 174-181.

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Management and Its Contribution

MANAGEMENT, in general terms, may be said to be planned activity directed toward accomplishing desired ends. It involves the weighing of values and the making of decisions. Everyone learns to manage, in some manner, the resources at his disposal. Some people learn to manage well, others poorly, but all manage.

Early man managed, but as life grew gradually more and more complex the methods he used gradually became more refined. In our own pioneer groups, where resources were few, where situations were relatively fixed and the facilities to satisfy one's needs were simple, man's efforts to manage—that is, to control his environment—were simple and direct. In our modern technological environment, where situations are complex and highly flexible and where many choices are possible, one must depend more upon reasoned ways of accomplishing results. Fixed rules or set ways of behavior are less possible, and traditional ways of doing things are less applicable. Under these circumstances man is forced to make a choice of the means and the methods he will use to get what he wants.

Since in a situation where management is required, one observes, analyzes, decides, and then acts, management and learning must go hand in hand. Art and science, so far as they are associated with a given situation or the means of solving a problem, will be used.

36 • *Management in Family Living*

The National Conference of Family Life agreed upon the following assumptions concerning management in the home: ¹

1. Management takes place in every home. Whether it is good or poor, there is still management. Its quality varies from one home to another.
2. Management permeates all aspects of family living.
3. The number of management decisions increases as the environment becomes more complex.
4. Although one member usually leads, all family members participate in home management, men as well as women. They may or may not be aware of their participation.
5. Children learn to manage through family experiences.
6. Management can be improved by conscious effort and education.
7. Management is a *means* of reaching family goals and improving family living rather than an end in itself.
8. Goals toward which families strive change during the family life cycle.

Goals and managerial abilities are not alike in all families; thus the quality of management varies from family to family.

What Is Home Management?

Home management is the administrative side of family living. It is the force—the mental work and power—that puts the machinery of homemaking into action and keeps it going. It is dynamic. It involves decision-making that leads to action. It is a means of accomplishment. For a person or a family, management is planned activity and living directed toward the nurturing of values and the satisfying of wants. It makes use of the findings of science and of knowledge concerning all aspects of family life—economic, social, psychological, physical, spiritual, and technological. It applies this knowledge in using the family's resources to meet living situations, to solve problems, and to help resolve conflicts. In short, *home management is planning, controlling, and evaluating the use of the resources of the family for the purpose of attaining family goals.* The goals are

¹ National Conference on Family Life (unpublished), Subcommittee Report: Home Management, September, 1948, p. 2.

in the realm of the material and the psychological; the processes are in the realm of the psychological and the technological. The use made of the family's resources and the extent to which family goals are realized depend in large measure on the managerial ability, interest, and leadership of the two homemakers.²

Interrelationship of Management, Family Values, and Goals

The following graphic representation of home management demonstrates the integrative role which management plays in homemaking; it shows the relationship of family values (the motivating forces, the *why*); the family goals (the results worked for, the *what*); and the process of management (the method or technique of using resources to bring all together, the *how*). In the well-managed home—that is, a home that is achieving its goals to a satisfying degree—management is looked upon as a tool or process.

Family Resources

The family's resources consist of the human resources, namely: *abilities* and *skills*, both native and acquired; *attitudes*, the opinions or feelings that motivate or retard action; *knowledge*, both factual and that of relationships; *energy*, or the power of members of the family to carry on activities. The nonhuman resources available for family use in its daily living are: *time*, made up of both short and long periods in which to carry on activities; *money*, which in a predominately exchange economy is exchanged for commodities, services, and mechanical power; *goods* and *property*, durable and perishable, owned by the family; *com-*

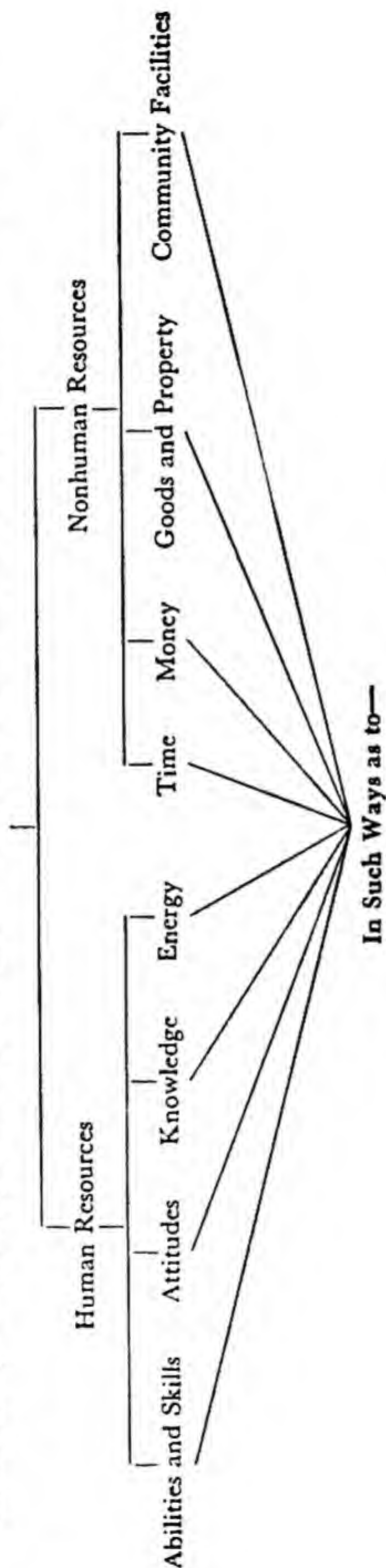
² In answer to the question, "What is home management and what is its function in family living?" the group of home management specialists who prepared the materials for the action area, Home Management, of the National Conference on Family Life, agreed that:

"Home management is a series of decision-making activities constituting the process of using family resources to reach family goals. It is the major *means* by which families get what they want from the use of their resources throughout the family life cycle. Management in the home is a part of the fabric of family living. Its threads are interwoven because decisions for the use of resources are made, whether the family is at work or play."

National Conference on Family Life (unpublished), Subcommittee Report: Home Management, September, 1948, p. 2.

THE INTEGRATIVE ROLE OF HOME MANAGEMENT

Home Management (HOW) Includes Planning, Controlling, and Evaluating the Use of the Resources of the Family:



REALIZE FAMILY VALUES (WHY):

Love—the interest in relationships with people
 Health—the interest in physical and mental well-being
 Comfort—the interest in making life as pleasant and agreeable as possible
 Ambition—the interest or desire for success in life
 Knowledge and wisdom—the interest in truth and its use in all activities of living
 Efficiency in work—the interest in the efficient making and using of things and in skillful workmanship
 Play—the interest in creative imaginative activity
 Art—the interest in beauty in all forms of expression
 Religion—the interest in goodness and rightness and in unifying all aims and purposes of living

Why = Motivation

ATTAIN FAMILY GOALS (WHAT):

Good health for each member of the family
 Continuous development of each member of the family throughout life—physically, mentally, socially, and spiritually
 Personal and family relationships that are satisfying
 Sufficient resources to ensure the health and welfare of members of the family and to provide educational and recreational advantages for each member
 Well-planned housing which meets the needs of the family and is conveniently located
 Individual and family participation in local and national affairs and an informed interest in world problems
 Management of the family resources to ensure attainment of the above goals

What = Results

How = Method

munity facilities, such as police protection, parks, roads, schools, libraries, etc., provided by the social group.

(The quality and amounts of these resources which any individual or family has at its disposal differ from every other family or individual.) Each is forced to work constantly with different amounts and combinations of resources. (The supply of money may change from time to time, or the human energy available may vary with health differences or with change in family membership. If human energy becomes restricted or limited, working to conserve the existing supply, or to improve health and increase the supply, or even tapping unused energy of certain family members are possible ways of meeting the management problem.) Or, again, learning to use another resource in place of human energy can often solve the situation or problem. Attitudes toward cooperation and sharing in home activities both increase pleasure in the home and use all human energy to a fuller extent.

(Intelligent and ingenious homemakers seek new knowledge and ways to improve their managerial abilities, or even a change of family attitudes to help out. They are constantly seeking ways of using resources alternatively, of conserving limited resources or using those which are ample, and of finding hidden supplies of resources.

Families are not always aware of the total supply of resources at their command. A valuable resource may be either wasted or not used fully because of a lack of realization that it is a resource. Failure to use one's intellectual abilities or one's store of factual knowledge in meeting perplexing situations in living may fall into this category. A careful inventory of all resources available becomes essential if one is hoping to improve management in living.

The Management Process

As already pointed out, managing family resources to attain desired goals is a series of progressive and interdependent mental activities, consisting of planning, controlling the plan while carrying it out, and evaluating the results in light of family goals.

Each of these activities requires decision-making, as will be seen in the following discussion.

✓ Planning as Part of Management

(Planning in management enables the individual to work out ways of using his resources and of reaching goals.) The objective sought may be one that has been carefully thought out, or it may be one that flashes into the mind and is realized in a few moments.

Planning is thinking through the possible ways of reaching a desired goal, following each plan in imagination to its completion, and selecting the most promising. If the paths leading to the goal are easy to see, the choice of the best plan can be made quickly. When the path is hard to see or when something stands in the way of reaching the goal, the planner will find ways of overcoming these difficulties. If previous experience is not adequate to help one meet a situation or overcome difficulties, the seeking of additional information or help from others may be necessary before plans can be made and decided upon. The final act in planning is always one of decision; "it is the gate that releases action."³

The planner is constantly making use of his powers of thinking, memory, observation, reasoning, and imagination. According to Starch, "Everyday experiences in thinking occur in planning of any kind. A certain amount of thinking, both habitual and consciously directed, enters into the routine work of the day, into your schedule for an auto trip, in making a decision, or scheming to avoid an unpleasant task. The more intricate the plan, the more puzzling the schedule, or the more difficult the decision, the more necessary for you to think carefully."⁴

Through the planner's ability to recall or remember, he utilizes past experiences; through his observation, he makes use of what he has learned; by reasoning, he sees the relationships between facts; and through imagination, he arranges facts into

³ Alvin Brown, *Organization of Industry*, Englewood Cliffs, N. J.: Prentice-Hall, 1947, p. 210.

⁴ Daniel Starch, Hazel M. Stanton, and Wilhelmine Koerth, *Controlling Human Behavior*, New York: The Macmillan Company, 1936, p. 120.

new relationships and patterns. The more one develops these powers, the easier it is to plan and to meet situations in everyday living.

(Through plan-making and testing, effective habit patterns of planning are gradually acquired. The ease with which a plan is carried out depends to a large extent on how well the situations and problems to be met have been thought through.)

✓ Controlling the Plan in Action

(Controlling aids in putting plans into action, in carrying them to successful completion, and in conserving resources. Control calls for both leadership and joint action in the family group in attaining family goals. Skillfully done it means that no one person or small group will dominate the lives of all, but that one member will plan with others to make sure that resources are effectively used and that the plans are changed as the need arises, such as emergencies, unexpected guests, or illness. It also means that some wishes and satisfactions may be sacrificed or put aside temporarily for the sake of a more important need or want.

Controlling thus calls for flexibility in thinking and planning and not for a rigid, set pattern of action. It also requires that group welfare be emphasized, not personal desires.

Coordinating is another means of control. It unifies activities and parts of an enterprise or plan into a harmonious and workable whole. It helps to give individuals working together an understanding of the total situation and of the necessity for co-operation if the best results are to be achieved.)

The coordinated muscular system of the body does not operate perfectly because any one muscle or set of muscles is well developed, but because all muscles function in rhythm and as a smoothly operating unit. In the same way, the swinging of all parts of an enterprise into closely knit working relationships is essential for smooth and comfortable operation.

(Directing and guiding are means of helping control the plan in operation. Getting action from one's self as well as from others and keeping resources moving into useful channels for accomplishment require effective direction. Knowledge of what is to be done must be transmitted, methods and instructions for

doing the task must be understood by all, and individuals must be energized into purposive activity in order to get desired results.)

(Direction and guidance are so closely related that at times they merge. The difference between the two lies in the fact that, in direction, the emphasis is placed upon the process itself, since clear and adequate instructions must be transmitted in order to assure the understanding of the method of doing a job; whereas in guidance, the centering interest is upon what is happening to the individual carrying out the process.) (In a situation where human relations are involved or a child is learning methods of work, guidance will predominate because the growth and welfare of the learner are more important than the accomplished task.) Where speed in achievement or the quality of the end product is important and the experience for the person doing the job not so vital, direction is used to get action and results.

Occasions arise when clear-cut instructions may be the best guidance in order to give confidence to the learner. (In situations where safety is involved, accuracy of instructions and directions is essential.)

A thorough checking of available resources and the making of decisions as to the best way to use each one are the essence of control in the process of management. Control enters in whenever a resource is limited and alternative uses of other resources must be planned.

(As in planning, so also in working to bring the use of limited resources under control—to devise ways and means to use the more ample resources in ways that will save the scarce ones—one is continually using the powers of memory, observation, and reasoning.)

Evaluating the Results

Evaluating in management looks constantly toward both the process and the accomplishing of satisfying results. It is a checking-up and a testing which tells whether things are turning out as planned. It helps one to move forward more surely and more advantageously. It goes on as a plan is being carried out—it gauges the effectiveness of the plan and judges the quality of the

result. If evaluation flows with the action, mistakes can often be avoided and better ways devised for carrying out the plan.

Evaluation requires a basis for judgment. In home management the measure by which success or failure of a plan can be evaluated is the extent to which it has advanced family goals or specific objectives. The more definite and clear-cut the purposes and goals, the more accurately can be the evaluation.

The ability to view events objectively makes it possible to arrive at evaluations that will stimulate improvement in future planning or in carrying out plans. Learning to make intelligent self-evaluations also aids materially in accomplishment. ✓

Management in Action

The decision-making activities in management—planning, controlling, evaluating—are not separate and distinct from each other. They flow along together and are integrated into many different patterns of action. Each has an effect on the other. Each represents a stage of the management cycle. (See Figure 1.)

The planning stage begins when a problem must be solved and decisions made regarding a course of action and the use of available resources. Controlling enters into the next stage as the

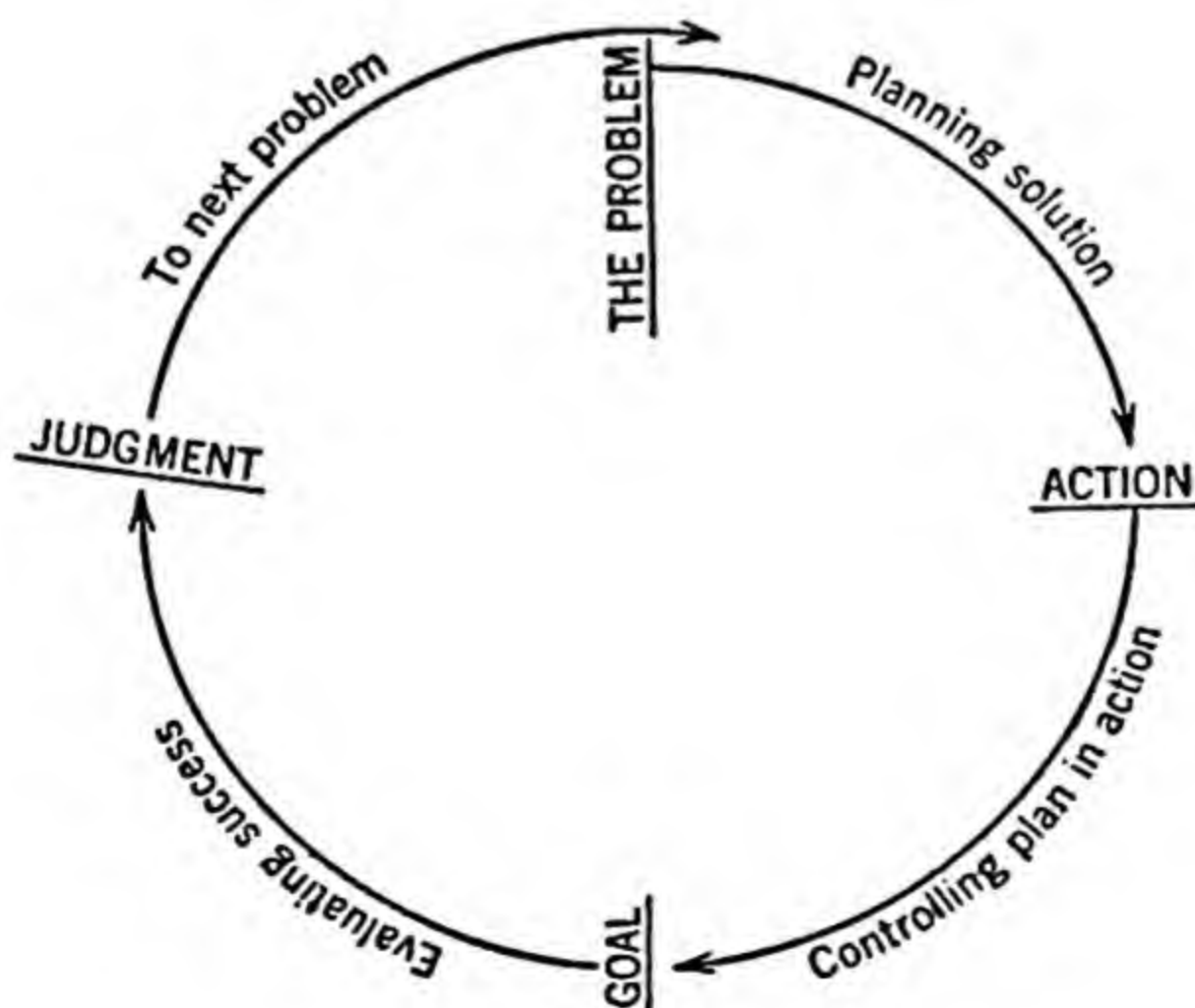


Figure 1. The management cycle.

plan is put into action and carried to completion. Evaluating, the third stage of the cycle, is the judging of the success or failure of the plan and the final results.

In a home plans are always in the making. Some are being carried out while others are being started or completed. All plans that are made and carried through follow the same cycle of action. The skillful integration of the decision-making activities helps assure the effective use of the family resources and the achievement of individual and family goals.

Management Applied in Family Living

Management in the life of a completely independent person functions in the same way as that described for the family. The resources are the same and the purposive activities and dynamic forces of management operate in the same way. The real difference lies in the goals motivating life and the absence of the need for sharing in the use of resources. Both goals and the use of resources are person-centered instead of family- or group-centered.

A person living in a family and sharing family resources also meets personal management situations and problems. In this instance the wishes and objectives may be person-centered, but they must be realized by using resources shared in common; or the personal resources of the individual may be used instead of family resources to satisfy the desire, thus saving the family resources for group use.

Three examples of management situations involving the use of time and money, knowledge and abilities, follow. The problem is one of supplying draperies for windows.

Let us see how each of the following persons might plan the use of the available resources to meet the need for her particular situation: a small-city homemaker not employed outside her home needs new draperies for the family living room; an independent professional woman journalist, living alone in her apartment, also wants new living-room draperies; and a 16-year-old 4-H club girl needs draperies because she wants to make her downstairs bedroom into an impersonal living room-bedroom where she can entertain her friends.

Mrs. Stewart, the homemaker, is the wife of a foreman in a local plant that manufactures home-size quick-freeze units. Mr. Stewart's salary is the only source of their moderate income. They have two growing boys. They are buying their modest five-room cottage with the aid of an FHA-insured loan. They are solvent, they take part in community affairs, and they are respected by all who work with and know them.

Mrs. Stewart needs new living-room draperies and knows that if they are of a sturdy fabric and well-made they will withstand the not-too-gentle use given the room by her growing family. The family also has planned to buy a new overcoat for Mr. Stewart. This requires careful planning and thoughtful buying of both the draperies and the coat. They find a coat that seems just right in weight, color, and wearability, but it costs slightly more than they had anticipated. Mrs. Stewart figures the money available, she thinks through how she has committed herself to her church and her community activities, and she decides that she can arrange time to make the draperies herself and release part of the money planned for the draperies.

Mrs. Stewart can sew fairly well, but she does not know how to make draperies. She investigates and finds that a local department store has what they call a "sewing clinic," where customers can bring their sewing problems and receive help. She buys the material, goes to the sewing clinic, learns how to make the draperies, and the family has both the coat and the draperies, using for these two items the amount of money originally planned for one, but they have also used both the time and the abilities of Mrs. Stewart.

Turn now to Miss Young, a professional journalist. She is in charge of the homemaker's page on a large city newspaper. She has a liberal salary and lives by herself in an apartment in what is considered to be a desirable part of the city. She, too, needs new draperies. Quite recently in a series of articles, "Make It Yourself and Save Your Dollars," she had included excellent illustrations and clear-cut instructions on making draperies. She had worked hard on this series and thus had ample knowledge, but she also had the money to have the draperies made. What she did not have was time to do the job. She went to the

interior decoration studio of a department store, picked out her fabric and the style of the draperies; she placed the order to have them made, rods installed, and draperies hung. Meeting the situation in this way cost more money, but her time was at such a premium that she could more advantageously put the dollars into the custom-made draperies than use the time it would take to make them herself.

Next consider Susan, the 4-H club girl, who wants a living room-bedroom. She too wants pretty draperies in her room. She has had a project in her 4-H club program which covered the fixing-up of a young girl's room. In the project she had made a box cover for her cot from two old unbleached bed sheets that her mother had started housekeeping with, but had laid aside some years earlier. The sheets were a nice texture and Susan tinted them a slightly darker tan color. She put the cover together with cording made from the gay red fabric of her last year's dirndl skirt which she no longer wore.

Her father operates a one-man farm, and although a good farmer, he does not have much extra cash for the family's personal use. Besides, other expenditures were planned, since a power line had recently been put into the district and her mother wanted some electrical equipment.

Susan knew there was no money to buy curtain material unless she used some of the money her mother planned to use for an electric iron. As she pondered over her problem, her mother suggested she go to the church rummage sale. Here she found strips of material with a pretty design and a red stripe matching the red of the couch cover for only 50 cents. She pressed the material, made cottage curtains, and her room was as gay and attractive as she had wished it to be. She had enough material left over to make a cover and small pleated ruffle for a round wooden lard pail to be used as a hassock and storage space for shoes. Susan had thus used her time, knowledge, and ingenuity to fulfill her desire, and the money was left for purchasing her mother's iron.

So it goes with management in living, whether in personal life or in the home. Clever, intelligent, and wise homemakers and members of their families know what they have to work with,

they are honest with themselves, they face the facts as they are and surmount the obstacles by planning. They avoid wishful thinking about life, and they do not allow themselves to make excuses. They recognize that the resources at their command are not what the next-door neighbor may have, or they may realize that they have resources the neighbors do not have. Homemakers are daily using resources at their disposal alternatively—time instead of money, knowledge or skills instead of money, and hundreds of other combinations. The more thoughtfully the use of resources is planned for and their use directed into planned channels, the richer will be the life of the family.

Developing Managerial Abilities

Growth in managerial ability goes hand in hand with the experiences an individual has in these purposive activities. The more opportunities one has to make management decisions—and take the consequences of these decisions—the more able he is to assume management responsibilities.

The probable curves of improvement in management for three persons are pictured in Figure 2. Curve 1 represents a gradual and increasing growth in the development of managerial abilities by a person who rather soon arrives at a high level of proficiency. Curve 2 represents the development of one who shows slower growth, yet who makes definite and gradual improvement. This person may or may not ultimately make as good a manager as the one above. Curve 3 represents the managerial ability of one who shows improvement for a short period in the beginning but little from then on.

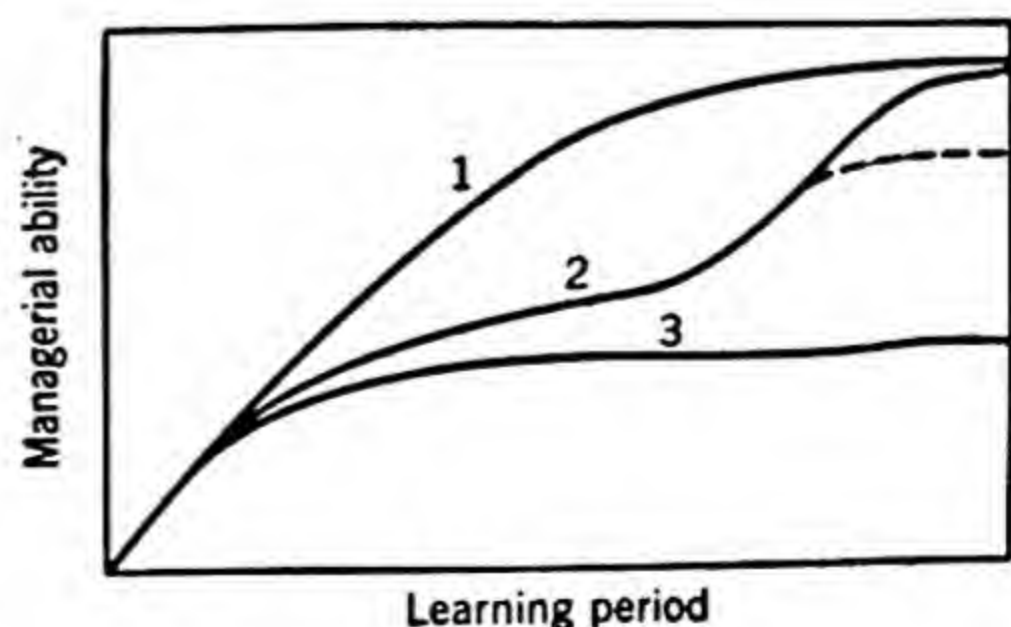


Figure 2. Probable curves of growth in managerial ability.

As an individual shows improvement, management learnings become automatic. Habit patterns of management are formed. When this has happened, the habit sets up a chain of stimulation from which action follows without conscious decision-making. The mind is then free to make decisions about new situations or management problems as they arise. On reaching this point, a person moves smoothly and effortlessly from one responsibility to another, gradually attaining higher levels of management.

Quality of Management

As indicated before, some kind of management, be it good or poor, takes place in every home. What causes the quality of management to vary so? This question may be answered by referring to an analysis made by the group of home management specialists concerning the reasons that may block improvement in management in the home. The most frequent blocks they found are these situations: ⁵

1. A family may not be aware of the activities of management; thus cannot know the contribution of management to personal and family achievement.
2. The family may not be aware of the total supply of resources available for their use.
3. Homemakers are apt to want formulae for using the resources they are aware of, rather than guides to be adapted to individual needs.
4. They do not realize the need of evaluating results in light of goals of the family in order that they may manage to better advantage in the future.
5. The goals of the family are not definite or strong enough to motivate a better use of the family's resources.

These failures to understand what management is and what good management could do for a family are difficult stumbling blocks.

⁵ National Conference on Family Life, *op. cit.*

✓ Qualities Making for Effective Management

The home invariably reflects the character of its management. The qualities that make for success are reflected in the work of the household, in the home life of the family, and in its social life generally. The creation of a harmonious, willing, and integrated working spirit within the family group calls for a number of qualities: intelligence, enthusiasm, understanding of human nature, imagination, judgment, perseverance, adaptability, and self-management. Other qualities might be mentioned, but these are the ones that seem basic.

Intelligence comes first as a necessary characteristic of a successful homemaker. According to Woodworth, "As a word, *intelligence* is closely related to *intellect*, which is a comprehensive term for observing, understanding, thinking, remembering and all ways of knowing and of gaining knowledge. Intellectual activity yields knowledge of a situation. Intelligent activity does this and something more. It is *useful*, it helps in solving a problem and reaching a goal. Counting, for example, is an intellectual activity and yields knowledge, but whether this knowledge is useful or not depends on the matter in hand. Counting the chairs in your room and the guests you expect is an intelligent way of making sure you have enough chairs, but counting the letters on a page is scarcely an intelligent start toward learning a lesson. In common speech, then, intelligence means *intellect put to use*. It is the application of intellectual abilities in handling a situation or accomplishing any task."⁶

Thus the ability to learn to pick out the essentials of a problem, to see the situation as a whole, to see relations between old and new, and to use knowledge previously acquired in solving a new problem and in reaching the goal depends upon intelligence.

Enthusiasm is another characteristic that successful managers always seem to have. This quality is in part a by-product of good mental and physical health, in part a matter of tempera-

⁶ R. S. Woodworth, *Psychology*, New York: Henry Holt and Company, 1940, pp. 97-98.

ment, and in part a result of a conviction of the significance of the undertaking.⁷

Enthusiasm is contagious—it stirs others to become interested in an activity and stimulates all to higher levels of proficiency and productivity. A sustained, lively, and healthy type of enthusiasm is preferable to an erratic type which may be bubbling or excessive at one time and completely lacking at others. The latter kind is exploitive and suggests emotional immaturity and unbalance. The mother who is enthusiastic about her work will infect others with her spirit. By giving encouragement, she may develop enthusiasm in others.

• *An understanding of human nature* is an indispensable quality for successful home management. The sympathetic understanding of the individual differences of members of the family, and their probable reactions to different personalities and situations, is a great aid in solving many problems of human relations and the reducing of friction and disappointments which frequently occur in family life. Knowledge of the abilities, likes, and dislikes of each member of the family serves as a guide in making plans and in fitting responsibilities to individual capacities.

The homemaker who has confidence in the ability of others is likely to express approval when work is well done. One who is consistent and fair in dealing with all problems does much toward creating happy relations in the home.

Imagination is an essential characteristic for all creative experiences. Imagination is the ability to recall facts and ideas and to rearrange these in new relationships or patterns. It enables one to visualize and make plans and to foresee the results of a certain plan of action before it is actually carried out.

One relies upon imagination whenever faced with a new situation in which past experience gives only slight guidance or in which a new method of attack must be determined. Frequently the need for this quality arises instantaneously, as when a sudden shift in plans is necessary or when emergencies occur. If this

⁷ Ordway Tead, *Human Nature and Management*, New York: McGraw-Hill Book Company, 1932, p. 154.

faculty is utilized to the fullest extent, one is able to anticipate many problems before they arise.

In making plans for a new and unknown course of action, one who can readily visualize what she would like to see done and how she should go about it is the person who moves smoothly from the solution of one problem to the next. Originality and resourcefulness are the direct outgrowths of creative imagination. "The accuracy with which one's mental picture fits the processes with which one deals, is an important element in one's success or failure in management." ⁸

Judgment is one of the most priceless of characteristics. It is that quality which enables one to weigh fairly the various facts in a situation and to see the problem in relation to other problems to be faced. The ability to weigh critically, to evaluate, to analyze, and to interpret the experiences of oneself and others is of vital importance in making decisions on the best course of action to follow. Judgment is acquired through experience and it grows slowly.

Perseverance is another valuable quality. This characteristic combines courage and patience. Its possession means that a person believes so thoroughly in the inherent value of whatever the idea or task in hand may be that he or she is willing to work courageously and unremittingly for its achievement. It is that quality that gives one the courage to face facts as they are and to act in full knowledge instead of blindly. It enables the family to see beyond the short-time goals, those less-challenging routine jobs, to the accomplishment of the more distant goals.

Adaptability is that quality of human nature which makes for flexibility in living. Much of a homemaker's success in meeting her daily problems depends on her ability to adapt herself or her plans to changing circumstances. The human environment is not static. Conditions and demands change from day to day, so that no sooner has she adjusted to one set of conditions than she is called upon to adapt to another. Plans must frequently be shifted or even given up entirely. Conflicts must be adjusted

⁸ H. Hart, *The Science of Social Relations*, New York: Henry Holt and Company, 1927, p. 36.

and difficulties overcome. Failure to meet changing conditions reflects an inflexibility of mind which stifles growth and progress and furthermore causes a lack of harmony in the home.

Self-management, or the management of one's own feelings, is a requirement of all members of the family. The home is a highly personalized enterprise founded upon the intimate and affectional life of its members. Many problems of management involve personal adjustments and relationships. A homemaker who can keep her head when personal conflicts arise is much more capable of guiding the situation intelligently than one who has little self-control. Self-management is required for working amicably and harmoniously with every member of the family and for handling emotional entanglements without a display of feeling. The effective homemaker is one who can "take things" as they come and stand up under strain.

Discouragement, worry, frustration, or a feeling of martyrdom—all negative qualities—indicate bad mental health.⁹ They show a spirit of discontent and are very likely to cause irritability and lack of self-control. Any one of these qualities may permeate the whole group and cause an atmosphere of discord.

Dangers in Overmanagement

There are certain dangers inherent in management which every family should be aware of and guard against. They are of real importance, as they affect all members of the household and may be felt outside the home as well. The negative phases of management are recognized in industry and are termed "preventive management."

Often the man or the woman homemaker who has unusual managerial ability can easily conceive purposes and plans much more rapidly than they can be carried out by the family. Usually, it is hard for this type of individual to realize the time it takes for each person to do his share of the work, and as a result the homemaker often becomes impatient with the lag. Such a person is apt to say, "It takes so much less time to do it myself than

⁹ James I. Tucker, *Intelligence at Work*, Los Angeles: Leader, 1943, p. 173.

to have the children do it." Often such a remark indicates that the homemaker has lost sight of the educational value to the child in learning to do the task, as well as the satisfaction the child would have from sharing in the activities of the home.

On the other hand, the overzealous home manager may crowd her children by expecting them to assume managerial responsibilities beyond their ability or interest. The lenient homemaker, however, may not allow her children to carry responsibilities according to their abilities. Either extreme robs the child of valuable experiences.

A homemaker who moves too far ahead of the family in planning and prethinking often develops a nagging habit or a "drive." It is difficult for members of the group who are "timed" differently to reconcile this temperament with their own. One of the challenges to parents is the synchronizing of the different tempos of the members of the family. Failure to recognize these differences is a real hazard to accomplishment and to happiness. The person who drives too rapidly when working with people of slower reaction time makes planning and organizing an *end* instead of a means to an end.

A danger that frequently arises in connection with time-and-energy management is the dissipation of the energies of some or all the family in order that one member may take on other responsibilities. The overloading of those who are already carrying heavy responsibilities usually causes worry, friction, emotional upsets, and unhappy relationships.

Overwork, which may result from trying to live up to a plan or to finish some task which takes more time than calculated, is another situation to be avoided. The woman who habitually works on her nerve or who borrows from the next day's store of energy in order to accomplish the work planned usually ends the day thoroughly exhausted and unable to carry her full share of responsibility the next day. The results of this practice are pointed out in the discussion of fatigue (Chapter 7).

Another danger comes with the overenergetic man or woman who is constantly bustling and is unhappy unless the entire family is also bustling. These persons are not so efficient as they

may seem. Successful management is not so obvious and allows a high degree of freedom of action for all members of the family.

The Challenge of Management

Management in family living is effective to the degree that it results in the accomplishment of work which must be carried forward in the home, makes possible better use of money, releases time and energy from work to allow time for recreational activities, improves the choice and use made of goods, influences the establishment of reasonable standards, and integrates human values into living as changed conditions affect family life. Such management is helpful and satisfying to individuals and the group.

The homemaker learns better management by analyzing situations, by studying human nature, by being aware of what is involved in improving management practices, by checking her own qualities against the qualities that make for success in homemaking, and by enriching her experience with new points of view. Self-satisfaction is deadly to development. Following blindly the path of least resistance, doing things the "way mother did them," or following traditional performance hinders improvement and progress.

Management is successful insofar as it places development of individuals ahead of organization and makes the process of management the means to the end, which is to provide satisfying human experiences. Solutions to home-management problems cannot be set up as "patterns of action" that a homemaker can fit to her individual family. Each family has its own needs that call for a plan of action of its own. The individual homemaker who would be effective in the management of her home will shape the daily plans of action to fit her own family's needs and desires. When this is done, management becomes a growing, vital part of the family's experience.

Additional References

- Andrews, Benjamin R., "Every Family Should Plan," *Journal of Home Economics*, Vol. 39 (March, 1947), pp. 617-619.
- Becker, Howard, and Reuben Hill, *Family, Marriage and Parenthood*, Boston: D. C. Heath and Company, 1955, Chapter 18.
- Bonde, Ruth L., *Management in Daily Living*, New York: The Macmillan Company, 1944.
- Cornell, William B., *Organization and Management in Industry and Business*, New York: Ronald Press Company, Third Edition, 1947.
- Crandall, Elizabeth Walbert, "Newer Aspects of Home Management," *Journal of Home Economics*, Vol. 48 (October, 1956), pp. 631-634.
- Cushman, Ella M., *Management in Homes*, New York: The Macmillan Company, 1945.
- Dickins, Dorothy, *Effects of Good Household Management on Family Living*, Miss. Exp. Sta. Bul. 380, 1943.
- Dickins, Dorothy, "Home Management and Family Level of Living," *Journal of Home Economics*, Vol. 37 (January, 1945), pp. 13-18.
- Fitzsimmons, Cleo, *The Management of Family Resources*, San Francisco: W. H. Freeman and Company, 1950.
- Folsom, J. K., "Management and Self Management," *Journal of Home Economics*, Vol. 31 (October, 1939), pp. 519-523.
- Fox, J. M., "What It Takes To Be a Manager," *Advanced Management*, 22, No. 6 (June, 1957), pp. 18-21.
- Frank, Lawrence K., "The Philosophy of Home Management," *Home Management Papers*, 7th International Management Congress, 1938, pp. 3-6.
- Gilbreth, Lillian M., *The Psychology of Management*, New York: The Macmillan Company, 1914, pp. 2-3.
- Gilbreth, Lillian M., Orpha Mae Thomas, and Eleanor Clymer, *Management in the Home*, New York: Dodd, Mead & Company, 2nd Edition, 1959.
- Goodyear, Margaret R., and Mildred Chapin Klohr, *Managing for Effective Living*, New York: John Wiley and Sons, 1954.
- Gross, Irma H., "Home Management of Working and Non-Working Homemakers with Children," *Quarterly Bulletin*, Mich. Agr. Exp. Sta., Vol. 37, No. 3, pp. 324-334, 1955.
- Gross, Irma H., and Elizabeth Walbert Crandall, *Management for Modern Families*, New York: Appleton-Century-Crofts, 1954.
- Gross, Irma H., and Evelyn A. Zwemer, *Management in Michigan Homes*, Mich. State Coll. Exp. Sta. Bul. 196, 1944.
- Leavitt, Harold J., *Managerial Psychology*, Chicago: The University of Chicago Press, 1958, Chapter 6.
- Morhard, Mr. and Mrs. William C., "Husband and Wife Teamwork for Better Home Management," *The Kitchen Reporter*, published by Kelvinator Kitchen, May, 1954.

56 • *Management in Family Living*

Newman, William H., *Administrative Action*, Englewood Cliffs, N. J.: Prentice-Hall, 1951.

Paolucci, Beatrice, and Esther Everett, "Home Management Residence Looks Ahead to the Working Wife," *Journal of Home Economics*, Vol. 50 (May, 1958), pp. 331-334.

Richards, Max D., and William A. Nielander, *Readings in Management*, Cincinnati: South-Western Publishing Co., 1958. Chapters V, VIII, and X.

Savin, Margaret Noble, "Job Analysis of Homemaking," *Journal of Home Economics*, Vol. 39 (March, 1947), pp. 129-132.

Starr, Mary Catherine, *Management for Better Living*, Boston: D. C. Heath and Company, 1956, Part 1.

Wiegand, Elizabeth, "Management and the Employed Homemaker," *The Kitchen Reporter*, published by Kelvinator Kitchen, May, 1955.

Crandall, Elizabeth Walbert, "Home Management and a Theory of Changing," *Journal of Home Economics*, Vol. 51 (May, 1959), 344-348.

Malone, Carl C., and Lucile H., *Decision-Making and Management for Farm and Home*, Ames: Iowa State College Press, 1958.

Riebel, L. Jeanne, "Philosophy of Management," *Journal of Home Economics*, Vol. 52 (January, 1960), 16-19.

4

Evaluation of Management in the Home

CHECKING UPON THE EFFECTIVENESS and efficiency of oneself in the purposive activities in management requires analysis, honesty, and objectivity. Some device is necessary for those who wish to make a fair estimation of their managerial proficiency. A self-evaluation guide that sets forth the managerial abilities, or skills in management, and the personal qualities associated with management in homemaking, is one's means of making such an appraisal. Such a guide has been devised for the student who is learning home management, and is presented here as a method of helping her improve her management abilities as she progresses in her studies.

*A Self-Evaluation Guide for Students **

The guide given here brings into focus three major types of learning associated with management training: managerial abilities; techniques in homemaking (these are not management but are processes through which one passes as management is evidenced); and personal qualities connected with and making for success in management and the acquisition of managerial ability. In the list are only those qualities of personal development that lend themselves to changed behavior and improvement in a short

* An evaluation guide for homemakers will be found in the Appendix, pp. 524-528.

period of training. Where the care and training of a child are part of the management experience, a section on this work should be included.

The guide further gives three levels of achievement or performance—low, average, and high—with a characterizing description of each item. In using the guide, a student should study and analyze her abilities and characteristics carefully, be honest in self-appraisal, evaluate herself fairly, and avoid either an over- or under-estimation.

The first sheet of the guide is a form to be used in making a plan for improvement after the student has studied the guide thoroughly and evaluated herself to the best of her judgment and ability. As she checks through the guide, the phases of development wherein she feels she is strong will show up. These can be listed. Those phases of her abilities or qualities in which she has not judged herself high can well become the points of emphasis she wishes to work upon as she progresses in her training period.

After the student has worked forward for a short time, she will want to arrange a conference with her house adviser, if she is in a home management house; her teacher, if she is in a classroom; or her counselor who watches her development in her curricular studies. A discussion with an interested and sympathetic person will do much to help the student clarify her own ideas and move to further improvement in the management process and thus to higher levels of management abilities.

Although the guide was originally developed for a student in residence in a home-management house, it can be used in total or in part by students in other homemaking courses, as management permeates all living. Specifically, parts of the guide can be used in such courses as meal planning, clothing selection, or house planning that have, or should have, units that include managerial experiences connected with the subject matter.

The guide is most effective if the student is encouraged to *use it for self-evaluation when she first enters the training experience*. This forms a basis for judgment if she then, as time and work progress, *evaluates her work again* in order to detect improvement or lack of it. The re-evaluation can occur as fre-

A GUIDE TO SELF-EVALUATION AND IMPROVEMENT IN MANAGEMENT FOR STUDENTS OF HOMEMAKING

My Plan for Improvement

Where I Think I Am Strong	Where I Think I Need Improvement

A GUIDE TO SELF-EVALUATION AND IMPROVEMENT IN MANAGEMENT FOR STUDENTS OF HOMEMAKING

This is YOUR evaluation guide. To gain the most benefit from it, UNDERLINE those phrases which you think most nearly characterize you and your work. You may underline phrases in more than one block. The phrases will mean more if you begin each one with "I," or "I am," or "I have." After making your evaluation, make a plan for your improvement in management on page 59. This plan for improvement will be the basis for your first self-evaluation conference with your adviser. Frequent references to this guide will be a good check on your growth in managerial ability.

I. MANAGERIAL ABILITIES

A. Ability to Make Decisions

Ability	Low	Average	High
To see need for and make decisions	Slow or reluctant to make decisions. Lack self-confidence. Sometimes make decisions on matters for which not qualified.	Make decisions based on reason, but they are not always sound or timely. Have confidence, but sometimes am overly confident.	Make timely decisions. Because of ability have self-confidence and use it judiciously.

B. Ability to Plan (Planning)

To see situations and recognize problems	Unable to sense problems of self or of the group. Make a problem of normal situations.	Sense some situations and problems. May recognize those of self but not of group or vice versa.	Keen awareness to situations in the group and problems of self and group. Accept situations in group living as normal.
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To set up goals or see the results desired	Unable to visualize plans. Too ready to ask what the others want to have done.	Able to see aims for certain types of problems, but not all. Somewhat hazy in conceiving desired results.	Able to visualize and conceive quite clearly results to be accomplished.
To plan possible ways and means of getting results	Often not successful in finding ways and means of solving problems. Unable to use knowledge. Repeatedly ask for help before thinking. Conceive plans poorly or not at all.	Able to find solutions for some types of problems. Do not readily apply knowledge of facts to situations in real life. Make plans that are frequently incomplete.	Make rapid application of knowledge in meeting living situations and solving problems. Thorough in seeking information from available resources to figure out ways and means. Make plans that are well conceived and quite complete.
C. Ability to Carry Out Plans (Controlling)			
To control	Not aware of available resources. Wasteful of them. Make no attempt to use one in place of another. Lose control, and plans seldom are carried out.	Aware of limitation of some resources. Clever in devising alternative use of some resources. Usually conserve scarce resources. Able to control some means better than others.	Realize limitation of resources. Able to devise ways and means of using resources alternatively. Conserve scarce resources. Have the power to control the means planned for while carrying out the plan.

A GUIDE TO SELF-EVALUATION AND IMPROVEMENT IN MANAGEMENT FOR STUDENTS OF HOMEMAKING (Cont.)

Ability	Low	Average	High
To direct	Unable to give clear directions. Am indefinite or likely to be unpleasant in manner.	Can give directions when not under pressure. Usually give clear directions in pleasant manner.	Can give clear, concise directions in a pleasant manner, even when under pressure.
To guide	Unable to see difference between guidance and directions. "Bossy."	Sometimes, though not always, able to lead people to accomplishment. Sometimes "bossy."	Able to lead people in getting activities accomplished. Put emphasis on the person as well as the activity.
To coordinate	See each responsibility in home management as an isolated unit rather than as part of a whole. Tend to be apart from the group.	See some relationship between various responsibilities. May place perfection of work above human values. Enjoy certain members of group.	See each part of the home management experience in relation to the whole of living. Happy home living as a goal. Thoroughly enjoy the group.
To utilize a plan	Fail to use the plans I make. Cannot see possibility of adjusting plan. Allow plan to become an end instead of a means.	Usually follow plans. Usually able to adjust plans. Sometimes allow the plan to become an end instead of a means.	Able to use plans to accomplish results and adjust plan as work goes forward. Realize the plan is a means to gain results.

D. Evaluation of Planning and Work (Evaluating)

Ability to evaluate plans and work	Do not see the value of an analysis of past experiences. Unable to be objective. Tend to overestimate self.	See value of some analysis. Usually objective and analytical, but may not make a complete analysis. Usually honest in estimate of self.	Able to analyze behavior or work done and judge the results clearly in an objective manner. See the value of analyzing past experiences. Honest in estimate of self.
Ability to profit from evaluation	Do not change method or behavior after evaluation. Very little carry-over of learning from one experience to another.	Slow to change. Tend to think evaluation does not apply to self. Carry-over in some types of experience.	Willing to change method or behavior or both after evaluation. Have much carry-over of learning from one experience to another.

II. TECHNIQUES (NOT MANAGEMENT, BUT PROCESSES IN HOMEMAKING THAT SHOW MANAGEMENT)

Technique	Low	Average	High
Food preparation	Make little application of principles of food preparation. Frequent failures. Often serve unappetizing food. Am late with meals.	Observe principles of food preparation fairly well. Some failures. Usually serve food attractively and on time.	Observe principles of food preparation. Have few failures. Serve appetizing and attractive food at appropriate temperatures and on time.

A GUIDE TO SELF-EVALUATION AND IMPROVEMENT IN MANAGEMENT FOR STUDENTS OF HOMEMAKING (Cont.)

Technique	Low	Average	High
Food service	<p>Do not know how to serve food.</p> <p>Require constant supervision.</p> <p>Ill at ease while serving.</p> <p>Not interested in food service.</p>	<p>Can carry out service if considerable help is given in planning.</p> <p>Sometimes forget.</p> <p>Tend to be self-conscious while serving.</p> <p>Tend to go by rules of service instead of family needs.</p>	<p>Have rather complete knowledge of how to serve meal.</p> <p>Solve my own problems.</p> <p>Self-confident, calm and natural while serving.</p> <p>Adapt service to type of food and family situation.</p>
Food care and storage	<p>Do not know how foods should be stored or cared for.</p> <p>Not interested.</p> <p>Am messy with care of refrigerator.</p> <p>Wasteful.</p>	<p>Know how some foods should be stored and cared for.</p> <p>Not consistent in care of food.</p> <p>Am sometimes messy with refrigerator.</p>	<p>Have knowledge of food care and storage and use it.</p> <p>Use a good system of storage in both refrigerator and cupboard.</p> <p>Economical of supplies.</p>
Buying	<p>Do not know quantities to buy nor signs of quality.</p> <p>Do not bother to make market order.</p> <p>Overspend.</p> <p>Plan marketing time poorly, thus late with meals.</p>	<p>Vague as to quantity to buy and quality of some products.</p> <p>Usually use money to advantage.</p> <p>Sometimes late with buying.</p> <p>Sometimes forget items.</p>	<p>Specific as to amounts and quality.</p> <p>Well-planned market order.</p> <p>Clear and concise in giving order.</p> <p>Use money to advantage.</p> <p>Plan marketing time to assure supplies and not to interfere with other work.</p>

<p>Laundering and care of linen</p>	<p>Do not know laundering processes, so finished products are not clean and are poorly ironed. Waste time and energy during the process. Do not use linen wisely. Careless in storage of linen.</p>	<p>Launder so that finished products are in good condition if not too difficult to do. Sometimes extravagant in use of linen. Usually orderly in arrangement of linen in storage.</p>	<p>Launder so that finished products are clean and well ironed. Efficient in process. Use linen supply wisely. Orderly in storage of linen.</p>
<p>Care and use of household equipment and appliances</p>	<p>Unaware of what is available. Do not know how to store and care for equipment. Fail to consult directions. Careless in care and use.</p>	<p>Some knowledge of what is available. Sometimes consult directions. Know how to store and care for some equipment. Don't always make maximum use of what is available.</p>	<p>Aware of all equipment and use to advantage. Store properly and in order for next use. Follow directions.</p>
<p>Making the home livable: (1) Housecleaning, care of own room</p>	<p>Disorderly in own room and about the house. Not thorough in cleaning. Have little consciousness of responsibility for order in personal life or for the group.</p>	<p>Orderly on the surface in own room and about the house. Straighten misplaced things but am not always thorough in cleaning.</p>	<p>Am an orderly person, thorough in my cleaning. Aware of the contribution that order in personal life makes to group living.</p>

A GUIDE TO SELF-EVALUATION AND IMPROVEMENT IN MANAGEMENT FOR STUDENTS OF HOMEMAKING (Cont.)

Technique	Low	Average	High
(2) Artistic arrangement	Very little sense of balance, rhythm, and harmony. Allow the house to be bleak and uninviting. Satisfied to retain what someone else has done.	Fair knowledge of art principles. Can follow directions but lack originality and cleverness. Try to improve my artistic ability by making arrangements for the house.	Good sense of art principles. Original in arrangements that add pleasure to living. See various possibilities for using arrangements.
Keeping house records	Little understanding of the records. Not neat or accurate. Neglect records. Not prompt.	Not familiar with all records. Usually keep neat and accurate records. Sometimes procrastinate. Slow in completing records.	See the purpose of all records. Familiar with all forms. Keep neat, accurate and up-to-date records.

III. PERSONAL QUALITIES ASSOCIATED WITH GROWTH IN MANAGERIAL ABILITY

A. Social Qualities			
Quality	Low	Average	High
Responsibleness	Fail to recognize personal responsibilities. Unwilling to assume own share of family responsibilities.	Slow to recognize personal responsibilities. Usually carry own share of family responsibilities.	Recognize personal responsibilities in the group. Carry family responsibilities willingly, regardless of reward.

Dependability	<p>Shun responsibility. Satisfied merely to get by. Seldom on time. Forgetful. Fail to keep promises and appointments.</p>	<p>Can usually be depended upon to discharge responsibilities on time. Sometimes fail to keep promises and appointments. Sometimes forget.</p>	<p>Assume responsibilities and carry them out promptly. Keep promises and appointments. Seldom forget.</p>
Adaptability	<p>Adjust slowly to new environment. Unwilling to modify plans and opinions. Upset by sudden change.</p>	<p>Try to adjust. Usually successful in adjusting but not always. Sometimes upset by change.</p>	<p>Adjust readily and pleasantly to new situations and environments. Seldom flustered by sudden change.</p>
Cooperativeness	<p>Do not work well with others. Do no more than is required. Often antagonistic or bored.</p>	<p>Work moderately well with others. Sometimes do more than personal share. Sometimes expect too much credit.</p>	<p>Work harmoniously with others. Willing to do more than personal share in emergencies.</p>
Initiative	<p>Need constant help and advice. Never take the lead. Seldom contribute to group discussion and planning.</p>	<p>Sometimes take the lead. Do not often find new ways to do things. Usually have ideas in group discussion and planning.</p>	<p>Willing to take the lead. Interested in finding new methods. Contribute ideas in group discussion and planning.</p>

A GUIDE TO SELF-EVALUATION AND IMPROVEMENT IN MANAGEMENT FOR STUDENTS OF HOMEMAKING (Cont.)

Quality	Low	Average	High
Poise	Ill at ease. Easily upset.	Sometimes ill at ease in a social situation, particularly with older people. Sometimes upset.	Natural in a social situation. Usually at ease and composed.
Speech and voice	Use poor English. Have an unpleasant voice. Use excessive slang. Enunciate poorly. Do not express ideas clearly.	Usually use good English. Sometimes loud. Not always clear in expressing ideas.	Use good English. Have a pleasing, well-modulated voice. Express ideas clearly.
B. Physical Qualities			
Grooming	Fail to observe personal hygiene. Dress inappropriately for various house activities.	Usually observe personal hygiene. Dress inappropriately at times.	Keep personal hygiene above reproach. Dress appropriately.
Vitality	Listless, habitually tired or complain of being tired. Wasteful of energy.	Moderately active. Sometimes listless. Not always careful in use of energy.	Full of life and energy. Know when and how to relax.
Posture	Have poor standing or sitting position or both.	Usually have good carriage. Often slump.	Graceful and erect in carriage, though sometimes slump.

C. Mental Qualities

Open-mindedness	Resent suggestions. Do not seek critical analysis by instructors. Utterly discouraged by, or misinterpret, criticism. Resent being asked to make self-evaluation.	Usually accept, but do not always profit from, critical analysis by instructors. Sometimes have resentful attitude. Question value of self-evaluation.	Welcome, invite, and grow through critical analysis by instructors, members of group and self-evaluation.
Breadth of interest	Narrow. Satisfied with few interests. Make no effort to have varied interests. Self-centered and not aware of either local or world problems.	Have limited number of interests. Attempt to make other contacts. See local problems but seldom interested in world affairs.	Interested in a wide range of activities and people. See my part in solving world problems.
Ingenuity	Show little imagination. Bewildered in new situation.	Solve problems with a degree of originality. Sometimes creative.	Clever in devising solutions to meet perplexing problems. Have rapid association of ideas. Show creative imagination.
Self-management	Not master of self. Emotionally unstable and temperamental.	Usually stable. Sometimes temperamental.	Well balanced. Show self-control in majority of cases.

A GUIDE TO SELF-EVALUATION AND IMPROVEMENT IN MANAGEMENT FOR STUDENTS OF HOMEMAKING (Cont.)

Quality	Low	Average	High
Judgment	Make erratic or snap decisions. Impractical, prejudiced.	Sometimes biased. Usually rule out prejudice. Usually weigh facts.	Rule out prejudice. Weigh all facts fairly.
Sense of values	Rather indefinite concept of life. Have no definite goals. Blind to real facts.	Not always sure of what is important in living. Tend to idealize without facing facts. Have fairly well-defined goals.	Clearly defined goals. Workable philosophy of life. Face the reality of facts in living.
Disposition	Self-centered. Poor sense of humor. Pessimistic. Am moody and hypercritical.	Usually happy and cheerful. Sometimes complain. Enjoy certain people.	Happy and cheerful. Enjoy people. Optimistic. Have a sense of humor and use it kindly.

quently as the student or teacher desires. The guide should not be considered a rating scale but a device to help the student learn management and, through self-evaluation, develop her managerial abilities during the learning period.

Additional References

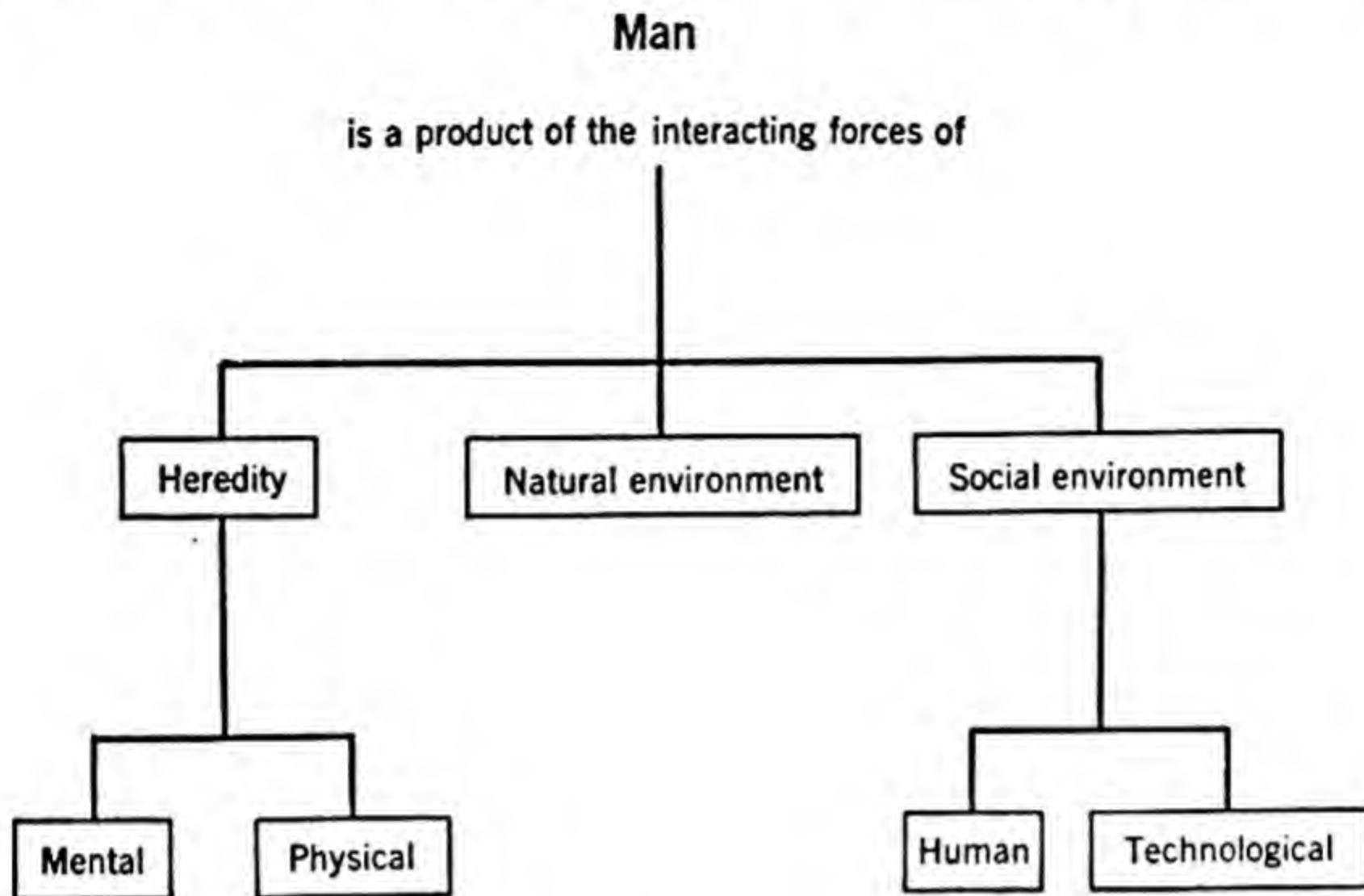
- Army, Clara Brown, *Evaluation in Home Economics*, New York: Appleton-Century-Crofts, 1953.
- Brown, Clara M., *Evaluation and Investigation in Home Economics*, New York: Appleton-Century-Crofts, 1941.
- Cameron, Anne, "The Development of an Instrument to Evaluate the Ability of College Home Economic Students to Apply Home Management Generalizations and Facts in the Solution of Homemaking Problems," *Journal of Home Economics*, Vol. 47 (March, 1955), p. 265.
- Davis, Jean, "Nonresident Home Management for Married Students," *Journal of Home Economics*, Vol. 52 (January, 1960), 20-22.
- Evaluation for the Improvement of Family Living*, Department of Home Economics, National Education Association, Washington 6, D. C., Bul. 1955.
- Evaluation Techniques as Effective Teaching Techniques in Home Economics*, The Pennsylvania State College, School of Home Economics, Publication 115, June, 1951.
- Fleck, Henrietta, *How to Evaluate Students*, Bloomington, Illinois: McKnight and McKnight, 1953.
- Gross, Irma H., *Measuring Home Management*, Mich. State Coll. Agr. Exp. Sta. Circ. 211, 1948.
- Gross, Irma H., and Elizabeth Walbert Crandall, *Management for Modern Families*, New York: Appleton-Century-Crofts, pp. 74-80, 341-344, 502-508, 560-565.
- Gross, Irma H., and Esther Everett, *A Home Management Yardstick*, Section of Home Economics, Mich. State Coll. Agr. Exp. Sta. Folder 6, 1947.
- Gross, Irma H., and Evelyn W. Zwemer, *Management in Michigan Homes*, Mich. State Coll. Agr. Exp. Sta. Bul. 196, 1944.
- Melby, E. O., "Role of Evaluation in Improving Teaching," *Educ. Leadership*, 15, No. 4 (January, 1958), pp. 218-220.
- Newman, William H., *Administrative Action*, Englewood Cliffs, N. J.: Prentice-Hall, 1951.
- Rawlings, G., and H. Herman, "Self Evaluation Promotes Democratic Living," *National Elementary Principal*, Vol. 22 (July, 1943), pp. 493-497.
- Remmers, H. H., and N. L. Gage, *Educational Measurement and Evaluation*, New York: Harper and Brothers, Revised, 1955, Chapter 11.
- Tyler, Ralph W., *General Education in the American High School*, Chicago: Chicago University Press, 1950.

5

*Home
and Family Life
in a Changing World*

EVERY INDIVIDUAL BORN into the world is endowed with certain qualities or characteristics which he inherits through his parents. Because he is genetically a new combination, he is different from each of his parents. Besides this mental and physical inheritance, every individual at birth inherits a natural environment. This heritage includes the air he breathes, the water, land, vegetation, minerals, and animals found on the earth. Every individual is also born into a social heritage, a human and technological environment, which is the product of man's efforts and human society. This social heritage consists of language, customs, morals, religions, science, the arts, philosophies, social institutions, and technological tools and equipment. The environment into which each individual is born and in which he lives and develops also makes him different from every other individual. Each individual as we see and know him is thus a product of two factors, heredity and environment.¹ These factors are represented in the accompanying diagram.

¹ W. F. Ogburn, *Social Change*, New York: McGraw-Hill Book Company, 1939, pp. 1-6.



Rise of Technology

Throughout life there is a continual interaction between the individual and his environment. The forces of environment act upon the individual and the individual acts upon his environment. From the beginning man had to find ways of dealing with the effect of these forces upon himself. Since he was unable to do this with his own physical equipment alone, he was forced to create tools and methods of various kinds to assist him in his struggle. Out of this struggle man has developed a complex technological environment which has become one of the main parts of his total environment. Man with his heredity today may be said, therefore, to stand in the midst of a three-dimensional environment: natural, human, and technological.

As human needs and desires change through time and with progress, new tools, new substances, and new sources of power are discovered and created, and new methods are devised for meeting needs and wants. In turn, new desires arise as a result of progress. In this process man gains more and more control and increased knowledge of his natural and technological environment, but his human environment becomes more difficult to control.

The shelter and protection provided by our homes; the equipment that enables us to produce, prepare, and conserve food; the tools that save time and human energy; the public and private conveyances, such as trains, automobiles and airplanes, that provide rapid and easy transportation to and from places; and the radio and television with their speedy transmission of information, are all examples of man's increased control of his technological environment.

The impact of these changes upon the human being and his social institutions gives rise to conflicts, since man tends to accept new procedures, new equipment, and new products in his technological environment more readily than changes in his personal life. In adjusting to the new, social and cultural change lags behind technological change, with the result that a constant effort is made on the part of man to bring the two together.

Role of the Family

The family group early became an important part of man's social environment, both to meet his personal needs and to help control his natural environment. It has remained a vital social institution among all peoples and throughout all times.

The family may be characterized in many ways. Here it is defined as that social group (or unit) of people living intimately together in one abode and dependent upon the same income. This group commonly consists of husband and wife or father, mother, and child or children, although sometimes it includes also a dependent relative supported by the major breadwinner. So conceived, the family is a nucleus of close personal relationships and shared experiences. The human values which are shared in this closely knit association are of fundamental importance in the development of the individuals that compose the group.

The family fulfills certain functions for man and society. The affectional, among other functions, is of prime importance and is the only one retained *wholly* in the modern family. Furthermore, its importance mounts as changes take place and as the

companionship type of family emerges as the contemporary and future pattern.

In man's efforts to adjust to change in each part of his three-dimensional environment, certain aspects of other family functions—economic, religious, protective, educational, and recreational—have been turned over gradually to agencies in the community. This does not mean that these functions are no longer the responsibility of the family, but rather that they have been partly assumed by outside agencies. Families should not release responsibilities and influences too early lest major social problems arise. This is well exemplified by the rise and spread of juvenile delinquency. ~~Yes, many other factors in the~~

Let us take the family's economic role as an example of the changed expression of one of the family functions. The home no longer functions primarily as a producer of commodities for home consumption, but it does furnish the labor supply that produces the commodities and services and it does direct the choice of commodities used by the family. These are responsibilities of important economic worth in the social group as man operates in his total environment, but they are not the same as in the earlier productive function of the home.

Likewise, the educational function has changed with time. Formal education now takes place in the schools, but it needs to be backed up by sound and understanding informal education in the home. No other social institution has yet been devised to give to the growing child the emotional security and the experiences and attitudes required for judging human values that family life in the home can give. This educational function of the family is essential to the training and development of the well-adjusted and socially useful citizen.

Many present-day problems in family life are due, in part, to the fact that families have turned over all aspects of family functions to other agencies, instead of retaining the part that can best be performed by the more intimate group and releasing that which can best be furnished by society. Undoubtedly this shift has robbed family members of many creative experiences.

The household, as differentiated from the family, consists of, in addition to the members of the family, the nonfamily person-

nel and the materials making up the home environment. It includes those elements of the natural and technological environment that gravitate around man and woman and come under their control in the home. The conduct of personal life and the relationship among members of the family group take place within a background of materials—the house, the surroundings, the equipment, tools, and furnishings—and of persons not members of the intimate group. These nonmembers may be relatives living in the home, guests, paid help, or others temporarily attached to the group.

Effect of Change on Family Life

What has happened in our changing civilization that has affected the home and family life? There are three important trends in modern life which help to explain the changes taking place.²

First, there is a changed mental attitude toward external authority—the rules and rights dictated by outside agencies, such as the church, conventional society, and government. In modern life external authority is no longer accepted without question. When man began to doubt the word of the philosopher and the overlord and the mandates and rules of the church, he began to test phenomena by the application of the techniques of science and he no longer accepted superimposed authority passively. Where once he felt humble before the superior intellect, he later felt his own power. When this change in mental attitudes permeates the consciousness of the common man, external authority begins to break down.³ World War II, which was perpetrated by the followers of the ideology of the “superman” type of authority and was won by those interested in the freedom of the common man, stands as one of the highest examples of man’s rebellion against external authority.

Industrialization is the second great trend that has altered the economic and social structure of the family. The machine, with its accompanying mass production, has changed the family from

² W. H. Kilpatrick, *Education for a Changing Civilization*, New York: The Macmillan Company, 1926, Chapter 1.

³ *Ibid.*, pp. 16–21.

a group that was relatively self-sufficient into one that is highly dependent on the general social group. Advances in methods of transportation and communication have made possible a rapid spread of ideas and information. Production of commodities is no longer for consumption only, but largely for exchange in the market. Inventions and scientific development, coupled with a wide variety of natural resources, have made for a rapidly growing and diversified industrial system. Industrialization has led to social integration and more and more interdependence within the social group. What nuclear research and the release of atomic energy for civilian use will mean to industrialization lies in the future. /

/The third trend which affects home and family life is the development of the democratic ideal, "that respect for man which we call democracy."⁴ As man became aware of his own power, his self-respect increased and he became important in his own environment. Because he felt his power and the importance of self, he asserted his right to some degree of freedom of action and expression. Democracy is conceived as a way of life, an ethical concept, and a process of group action or organization. In the democratic group members participate in *both* the making and carrying out of policies.⁵ /

The trends—changed mental approach, technological advance, and the recognition of the dignity of man and his rights in arranging his own affairs—show the various forces that are operating to bring about changes in the family group. These trends, which have been accelerated by two world wars within a quarter of a century, evidence many ramifications with far-reaching effects on the life of all individuals.

Attitude Toward Authority and Discipline

The changes which have taken place in society have brought a changed attitude toward authority in the home.⁶ Literally,

⁴ Ogburn, *op. cit.*, pp. 26-27.

⁵ John A. Vieg, *The Challenge to Democracy, I. Democracy on Trial*, Iowa State Coll. Bul. P21, 1941, pp. 623-625.

⁶ Christine Beasley, *Democracy in the Home*, New York: Association Press, 1954, Chapter 2.

authority means the power or right to act or to enforce action. This power was external in the old order. With the growth of science and with the increasing realization of the importance of the individual, the power of external authority has diminished and in its place has arisen an increase in the power of individuals to direct their own actions. This power of self-direction can be called *internal authority*.

A changed attitude toward authority is often the cause of conflict in many homes. One frequently hears alarm expressed at the freedom allowed the "modern generation" from early childhood through youth. Children no longer obey their parents, it is said, and they are not respecters of law. The claim is made that there has been a breakdown in authority—and so there has been. But the breakdown has been in external or superimposed authority and it takes time and education for a well-defined internal authority to be developed in families long guided by customary sayings and clichés about child development rather than by the findings of science.

Duvall and Hill point out that "discipline which promotes the development of the child has six characteristics: (1) it is firm, reliable, and kind; (2) it shows the child what others expect of him; (3) it encourages the child and promotes a feeling of faith in himself; (4) it strengthens the child's skill for better future performance; (5) it does not sever the child's sense of belonging to the group; and (6) it comes from mature, lovable adults worthy of being emulated."⁷

In the family, internal authority is a code of behavior built up from within the group. It is based upon understanding and a sense of justice and sound principles of guidance. It is that force which makes the members of a family act as they do, not because someone so commands, but because in the light of knowledge and the welfare of all it is the best way to act.

The change from external to internal authority in the home is well illustrated by the child who no longer obeys his father or mother just because one or the other says so, but because through his own reasoning he feels he should so act. He is then acting in accordance with the will of his parents because he understands

⁷ Duvall and Hill, *op. cit.*, p. 371.

why he should do so. A convincing answer to his request for a reason is necessary to the development of internal authority on the part of a normal child. Parents do not always find it easy to stop and explain the reason for every act the child is called upon to perform, for this requires time. Explanation is not always necessary, however, if the child's confidence has been gained through a large number of understood experiences. Internal authority can be built up from early childhood as the child develops in age and judgment in an environment of affection.

All gradations of discipline and guidance are found in present-day homes. Some are governed by authoritarianism of the most rigid type. Then there are still homes administered solely by adults and guided by pseudoscience and traditions. Time-honored sayings about children direct parent-child relationships and form the core of the external authority in those homes today as in the past.

Renu is a kadu (cucumber)

In homes motivated and guided by the more recent research of child psychology and teaching of parental education, control is primarily by internal authority. Although we are moving slowly toward family life guided by principles derived from research in the many fields that affect the home and toward a home where individuals are governed largely by internal authority, we are still in a transitional period.

Since the home has a lasting influence on the individual, those homes in which members are free to make their own decisions guided by internal authority will help build the quality of relationships needed in the companionship type of family. The present generation of young homemakers who want a democratic family life can take this as a challenge and courageously move toward sound principles as bases for child training.

The Home in an Industrial Context

Perhaps the greatest change in the home has been effected by the growing industrialization in modern society. Changing the tools and equipment of man alters the whole picture of his life.

The modern home is no longer primarily a producer of material goods, since industry has taken over that function.

Concurrently with the movement of production from the home to the factory, there has been developed a wide spread of services for people and the family group. These services also demand personnel. The three major results for the family group have been far-reaching.

First, the family members have left the home to work in office, shop, store, and factory. For some, the work life takes them far away from the family group; for the majority, however, return to the home is easy and frequent. This decentralization of members brings about a different design of activities for both the individual in his personal life and for the family group. *Second*, the home has become a consuming unit, a directive group for choosing and using goods and services, since the family shares in the use of the income that is returned to the home from the earnings of labor outside. *Third*, as science has been applied to the affairs of man, industry has caused an increase and a change in the items making up the inventory of goods and services used by the family in daily living. With these changes, the management situations and problems in the home are vastly changed.

Shift and Dispersion of Family Members

The decentralization of the family has changed the character of family life. Formerly, as a "mother-teacher," the woman in her home could direct the members of the family toward a common goal. Now she finds herself the leader of a group with widely diverse interests and activities, and she herself has varied interests. She must therefore have an understanding of and an interest in many things outside as well as inside the home. As one woman said, "I must even know who pitched the best game in the World Series, and I frequently have to listen to a game over the radio or watch television in order to recite it play by play to my husband and son when they can't hear it." Another woman in speaking of her responsibilities told how she listened to the market reports over the radio and kept a record of the change in prices paid for certain products in order that her husband might be informed of price trends.

So long as the home remained the center of production of material goods, the work to be done demanded many hands and because of this a premium was placed on large families. In the modern home very large families mean more backs to be clothed and more mouths to be fed without an accompanying increase in means to provide food and clothing. Reduction in size of families has been the natural result of the decentralization of the family under the factory system.

The smaller family has made a change in the kinds of relationship experiences among family members. This, in turn, has affected the educational responsibility of the home. In the smaller family the child-adult contacts increase materially and the child-child contacts decrease.⁸ The child has less opportunity to learn the natural give-and-take of living through association and experiences with children, and he often has difficulty in adjusting to others, both in childhood and later in adult life. The result may warp or even wreck the quality of relationships in the home. The nursery-school development is one answer to this problem.

With the transfer of people and productive processes from the home to the factory, creative experiences—those in which a person conceives, or helps conceive, and carries all or part of the responsibility for the execution of a project—are largely missing in work life. Factory and office routine are not always challenging and seldom require much imagination from the worker. The lack of creative activity in work has a depressing effect upon many individuals and is reflected in personal social relationships, particularly in the family circle. When interesting and stimulating experiences at home are not devised or developed to offset this lack, companionship in the off-hour activities is often sought outside of the home. The increase in the number of dance halls, night clubs, taverns and other places of amusement, with their nightly habitués, stands as witness to this fact.

⁸ Ray E. Baber, *Marriage and the Family*, New York: McGraw-Hill Book Company, 1939, pp. 277-318.

Changes in Home Production

With the mass factory production of commodities for exchange and its accompanying concentration of population in large urban centers, the modern home has become a consuming unit rather than a unit for producing material goods. Materials are bought either in a form ready for immediate use or partially prepared so that only a small additional change is needed for their completion, and they are bought for cash. The homemaker, instead of being primarily the director of home production for home use, is now a chooser of commodities and services to satisfy family wants and an adviser of choice-making in the family.

As purchasing agent for the family, the modern homemaker pays for the goods from the family treasury, using the family money income. In addition she and the father help the family in making decisions regarding the allocation of money to the various needs. In so doing, the mother finds that she is called upon not only to help choose what to buy, but also to help decide upon the method of satisfying the wants. For example, the high-school daughter has two clothing needs. One is for church or street and the other for informal parties. Shall two dresses be purchased or can one be found which will serve a dual-purpose? Shall the dress be bought ready-to-wear or shall it be made at home? The amount of time and energy needed if the dress is made in the home must be evaluated against the money cost. The use of human energy constantly comes into the picture of alternative choice and cannot be overlooked as a part of the consumer problem.

In feeding the family, the choice of a given food is also complicated, as the selection must often be made from a wide variety of qualities or prices, or both; or the selection may be among foods in a fresh, canned, or frozen state, or packaged products, or completely prepared foods. The home-size freezer unit and the rented freezer-locker service have changed the whole picture of the food supply for some families. The newer methods of preserving and storing foods and the partially prepared packaged foods have at the same time changed the homemaker's time-and-energy spending pattern.

¹ The array of decisions resulting from industrialization constantly brings to the homemaker a changing responsibility in getting and using goods. When the commodities consumed by the family were produced mainly in the home, training for homemaking took place in the home. The children received their training while taking part in the productive processes. They learned while doing, through working with the "mother-teacher," and through information and methods passed from mother to children. In the home where commodities are produced outside, children have less opportunity to carry responsibilities and learn homemaking skills.

Changes in Levels of Consumption

American industrialization through science and improved methods of production and communication has made available a tremendous stock of goods from which people may choose in order to satisfy their wants. The active and potential wants of individuals are constantly changing as they are confronted with this wide variety of choices. Thus the level of consumption, or "manner of living," constantly changes.

Kyrk has shown the level of consumption, or manner of living, to be a "description or inventory of the actual commodities, in some way valued and measured, which flow through or are used by a consuming unit, usually a household, during a given period."⁹ Level of consumption is not synonymous with standard of living, although it is its basis. A standard of living is a psychical fact. "It is an attitude toward, a way of regarding, or of judging, a given mode of living. It is a subjective view of certain objective facts."¹⁰ The manner or level of consumption comprises these objective facts.

Hoyt says, "The standard of living is the satisfactions which are considered essential by an individual or a group. Such satisfactions make up an organic whole. It differs from a scale or plane of living, which is merely the goods and services actually consumed: the pounds of butter, the dozens of eggs, the pairs of

⁹ Hazel Kyrk, *Theory of Consumption*, Boston: Houghton Mifflin Company, 1923, p. 174.

¹⁰ *Ibid.*, p. 175.

shoes, the tons of coal and the motion-picture tickets a family uses. Scale or plane of living is the materially measurable form of the standard."¹¹

^The level of consumption, or the content of the inventory of commodities used by the majority of families today, has increased and improved, largely because mass production has made more goods available for all. ^ This change of content is often referred to by writers when speaking of the improved American standard of living or of the superiority of the American standard over that of other peoples. The standard, along with the level of consumption for the average American, has improved throughout the history of this country.

/ Advertising is a method devised by industry to acquaint consumers with products. It has a potent effect upon the level of consumption. Radio and television advertising, which reaches into practically every American home, attempts to persuade the consumer to buy some article, or to change from one to another, or to change the brand. The advertiser has recognized the high place prestige and personal appeal hold for the individual and makes definite and constant appeal to emotional evaluation and personal gratification. Hence advertising has accelerated the movement for change in the content of the family's inventory, and, together with constantly increasing and rapidly changing stocks of commodities, has made intelligent buying ever more difficult for the family.

Democracy in the Home

As one reads the pages of early American history and realizes the vision of the founding fathers for a democratic way of life in the new world, one is puzzled by the page recording the story of the family of the era. There appears little of the democratic principle of individual rights or freedom of action in personal and family life that motivated action in public affairs. Family life was rigidly patriarchal, and into the twentieth century it remained so. The members of the family had few rights and

¹¹ Elizabeth Hoyt, *Consumption in Our Society*, New York: McGraw-Hill Book Company, 1938, p. 265.

privileges and were not free to voice opinions about the conduct and policies of the group. The child was told what to do and he did it; he was literally "seen but not heard." The status of the wife and mother was only slightly above that of the child. She had little to say about the policies of the family and none about the affairs of state.

Through the years, with the rise of the democratic ideal in social philosophy, women and children have gradually and consistently risen in social importance. In the modern home the woman has equality with the man, although there are still legal barriers in some states. Women are free to choose the kind of life they wish to live, either marriage or a career, or marriage and a career. They may choose marriage with or without children and be socially acceptable in either case. In short, a woman may consider her own personal desires either aside from or in connection with those of the family group.

In the modern home the child is considered a person with rights of his own, instead of a piece of property to be used in barter. In the colonial and pioneer home the child was considered an economic asset. In the modern home he may be a social asset, but in an exchange economy he is a liability instead of an asset. He is recognized as a member of the family group whose interests and desires are to be considered quite as much as and in many cases more than those of the adults. In spite of this, the policies of today's family are not always, in fact are usually not, arrived at democratically. The formulating of policies and the directing of conduct in the home are still man- or adult-directed. Like many other social experiences, democracy must be experienced to be truly learned. As we move into a social life guided by science and justice, the family, in order to give these democratic experiences and to have a companionable type of relationship, must find satisfaction in sharing and in joint planning.

Employment of Women Outside the Home

¹The rise and acceleration of industrialization in recent years have affected family life in a special way. The demand for women

in industry at the beginning of World War I and again in World War II encouraged many women, both single and married, to seek work outside the home. As the opportunities and demands increased, many women preferred to stay in factory and office work and other professions.

Gainful workers in 1910 included 7.8 million women and girls 14 years old and over. This number had almost doubled in 1940, when the average was 14.2 million. In 1947 the number had increased to 16.9 million, and by 1957 the average number of women working was 21.9 million. There are indications that this number will exceed 23 million in 1960 and 33 million in 1975.¹²

Before World War II, 30 percent of all working women were wives. Now, married women account for 55 percent of all women holding jobs. In the 1950's alone there has been a 59-percent increase in the number of working wives older than 35. The total of working wives 45 to 64 years has also doubled in the last 10 years. The mature woman is now playing an important role in the industrial world. The reduction of the supply of young women workers is largely due to the high marriage rate during early years, prevalence of high birth rate, and the increased number attending school and college.^{13, 14}

Blaisdell¹⁵ points out that "Many of the women past 35 years of age had had a taste of the working life during the war years and thus found it easy to enter or re-enter the labor market after their children had reached school or college age. Many were members of families which had purchased new suburban homes and worked to help pay for them. In many cases women 35 and over worked to help put their children through college and to assist them in the early years of marriage. Their ability to combine homemaking with a job has been made easier for the

¹² *Projections of the Labor Force in the United States, 1955 to 1975*, U. S. Bureau of the Census, Current Population Reports, Series P-50, No. 69.

¹³ *Women Past Thirty-five in the Labor Force, 1947 to 1956*, U. S. Bureau of the Census, Current Population Reports, Series P-50, No. 75.

¹⁴ *Spotlight on Women in the United States, 1956-57*, U. S. Department of Labor, Women's Bureau, pp. 8-10.

¹⁵ Richard S. Blaisdell, "More Women Are Working," *Journal of Home Economics*, Vol. 50 (April, 1958), p. 262.

homemaker by the availability of automatic appliances, prepared frozen foods, and other housekeeping aids. Many middle-aged women have sought jobs, too, in order to support aging and ailing parents. Still another factor may have been, particularly in the case of part-time workers, a need to supplement limited incomes received by their husbands in retirement."

At the present time over 6 million women are employed in clerical occupations. Over 3 million are operatives or factory workers. These two groups account for almost half of all employed women. Professional and technical workers, service workers, and private household workers each account for over 2 million women. The saleswoman group and the farm-workers group employ over 1 million each. Crafts and other occupational groups each had less than a million women. In all of these occupation groups, employment of women past 35 years has expanded sharply since World War II.^{16, 17}

The Family of Today

Many new changes are taking place in family life. Studies based on data from the United States Census Bureau have given a new picture of what is happening to home life in the United States. These changes have been gradual and little noticed until recent years.^{18, 19}

Earlier marriages have become more frequent in recent years. There is a trend toward men marrying at an earlier age and marrying women whose ages are closer to theirs. The average young man in 1950 was married at about the age of 23 years and his wife at about the age of 20. In 1890 the young man was about 26 years old and the bride, 22.

The ease of employment both by men and married women, the possibility of young men being called into military service, and

¹⁶ *Spotlight on Women in the United States*, op. cit., pp. 13-14.

¹⁷ *Womanpower*, National Manpower Council, New York: Columbia University Press, 1957, Chapters II and XI.

¹⁸ Paul C. Glick, "The Life Cycle of the Family," *Marriage and Family Living*, Vol. XVII (February, 1955), pp. 3-9.

¹⁹ Paul C. Glick, *American Families*, New York: John Wiley and Sons, 1957, pp. 3-45.

the willingness of parents to continue financial support of young married people attending college are some of the factors that have contributed to this trend.²⁰

Changes have also taken place in the ages of parents at the time of birth of their children. More families now have their children early in married life. They have their last child about 6 to 7 years after their marriage. In 1950 the median age of the father at the birth of his last child was 28.8 years; the mother's median age was between 26 and 27 years. It is predicted that the average size of family will probably increase gradually from 1954 until at least 1965, and then return to about the 1954 size of family.²¹ Under present conditions a couple can expect to have about 41 years of married life together. In addition to this they will have an earlier retirement and some leisure time to enjoy those years.

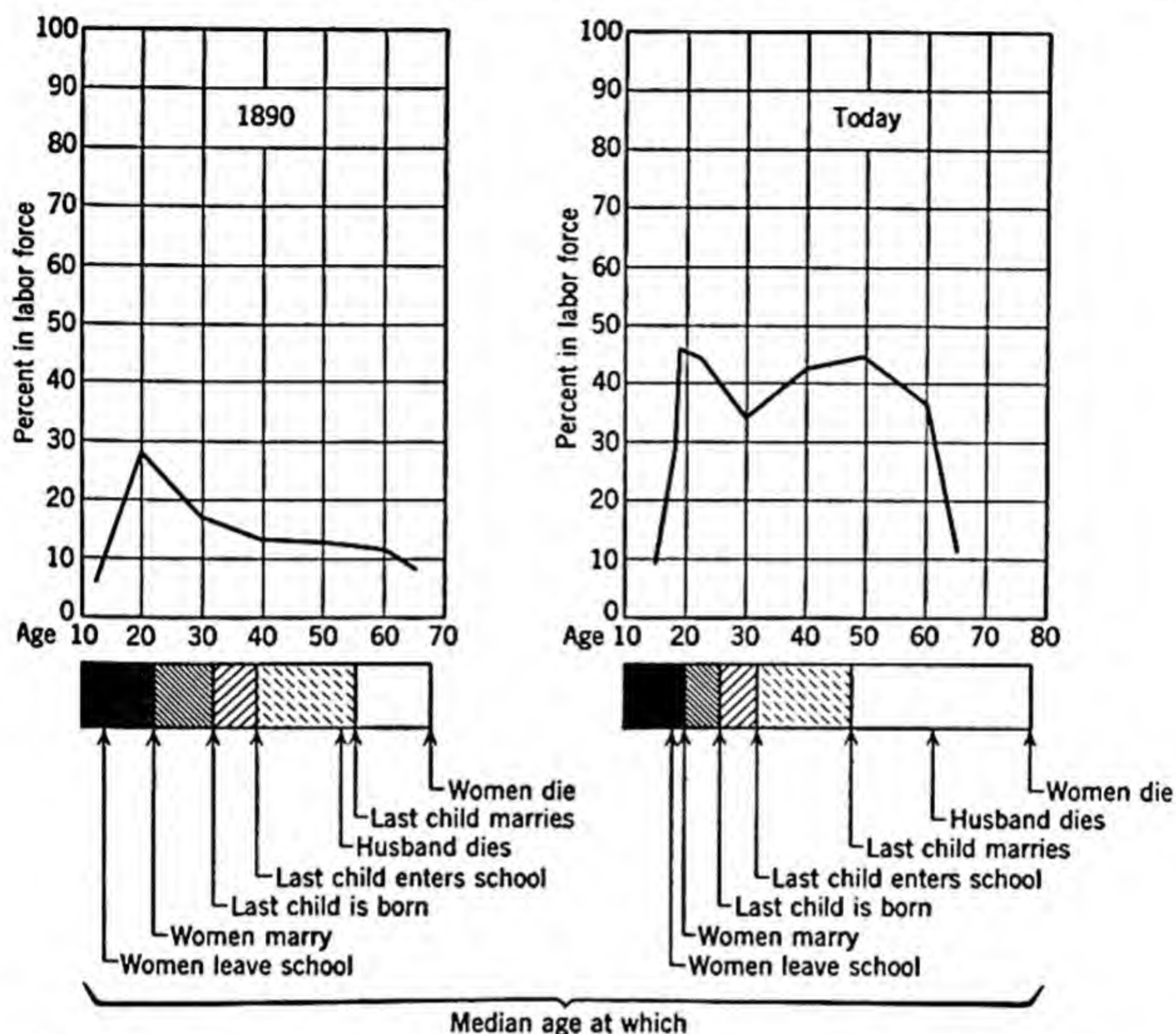
The contrast between the past and present place of work in the lives of women is shown by Figure 3. The upper left portion of the figure shows that the highest percentage of women in paid employment in 1890 was reached around the age of 20, and the proportion in the labor force dropped sharply for the women between 30 and 65 years old. Since then, the employment pattern has changed. Today, the proportion working stops declining at around age 30, starts to rise rapidly, and continues to increase until about age 50. Although the proportion of paid employment falls off quickly with advancing age among women over 50, there are more women in the labor force at all ages over 30 than there were in 1890.

The lower portion of the figure shows employment in relation to significant stages in the lives of women of 1890 and 1956. The completion of school, marriage, birth of last child, entrance of last child into school, marriage of last child, and death of husband mark the significant points.

The figure shows how much older women are now when they leave school than they were in the past and how much earlier they marry. It also indicates that they are younger when their

²⁰ Frances Lomas Feldman, *The Family in a Money World*, Family Service Association of America, New York City, 1957, p. 18.

²¹ Paul C. Glick, *American Families*, *op. cit.*, pp. 54, 66, and Chapter 10.



Upper portion of the figure is based on census reports. Lower portion based on data from Paul C. Glick, "The Life Cycle of the Family," *Marriage and Family Living*, Feb., 1955.

Figure 3. Work in relation to significant stages in the lives of women, 1890 and today. (From *Womanpower*, National Manpower Council, New York: Columbia University Press, 1957, p. 307.)

children enter school and marry; that they live longer; and that they are less likely to be widowed early in life.

The rising trend among wives to go back to work as the children grow up is boosting the family incomes and changing the way families live. For many families it means more money for such things as education of the children, a new home, or greater savings. More changes are seen in the years ahead when the majority of wives who have been returning to work in the last few years reach retirement age. There already are signs that

the income of employed wives is enabling many older couples to enjoy greater independence.²²

It is also significant that the number of middle-income families has been increasing and that more women in the middle- and upper-income groups have been going back to work.

Today, women have more freedom to choose the pattern of employment which best meets their needs and wishes and those of their families. This greater freedom of choice is bringing more women into the labor market for longer periods of their lives.²³

Management in the Modern Home

The changes in modern life are reflected in the management of the home. The changed attitudes toward authority and toward the place of women and children in society have brought many new problems in family relationships and in the use of family resources. The change in the home from a producing to a consuming unit not only increases the managerial problems concerning the use of human and material resources of the family but also requires different methods of meeting the problems. New knowledge is needed by homemakers if these problems are to be solved with satisfaction to all.

The present-day family is forced to consider its needs carefully and to choose wisely if it wishes to get the greatest return from its resources. *The process of management then does not change but becomes a rational method of dealing with change.*

In the modern home the intelligent use of resources is measured not only by the satisfaction obtained but also by the effect upon the development of family members and upon social welfare. The opportunity for young people to help in deciding how family resources are to be used provides a learning experience which cannot well be secured outside the home. Family participation in decisions about resources is essential for successful management in the modern home.

²² "What's Happening to Home Life," *U. S. News and World Report*, Vol. XLIV, No. 4 (January 24, 1958), pp. 88, 89.

²³ *Womanpower*, National Manpower Council, New York: Columbia University Press, 1957, pp. 142, 307.

In many homes today, when both parents work, management is considered a "we" role or a "husband-wife" role.²⁴ The major decision-making is becoming a joint responsibility of the father and mother and the children. Although the mother may spearhead the conduct of the home, responsibilities slip from one member of the family to another with remarkable ease and effectiveness.

In discussing the problems of the women who are trying to combine work and home roles, Weitzel²⁵ says, "Conflict about her two roles may, of course, be greatly diminished by the accepting, helpful attitude and co-operation of the husband. The dominant American family pattern is becoming more and more a sharing, democratic one. Certainly, the woman's work outside the home entails reorganization of a whole pattern of living, more complicated when children are present. The younger the children, the greater the reorganization and planning necessary if the home is to run smoothly. It is not a simple adjustment, for children must be adequately cared for and household chores continued. Even when there is money enough to employ a domestic servant, the problem of finding competent help is acute. If money is short, major homemaking responsibility rests with the woman, and her time and energies are divided between home and work.

"Physical energy is not limitless and bears a direct relationship to the emotional energy left to invest in husband and children. Consequently, the wife who is physically exhausted from house and office work is less able to meet the demands of husband and children. Encompassing both home and job responsibilities requires careful planning and cooperative effort by the woman and her family."

²⁴ Clark E. Vincent, "Role Clarification for the Contemporary College-Educated Woman," *Journal of Home Economics*, Vol. 45 (October, 1953), p. 569.

²⁵ Kathryn S. Weitzel, "The Working Wife—Her Present Dilemma," *Journal of Home Economics*, Vol. 49 (November, 1957), p. 690.

Impact of Crises and Disaster on Families

Any discussion of management in family living written primarily for young people would be unfair and naive if it failed to take cognizance of the shocks and disasters that overtake all homes in some degree. The family established upon a weak foundation is menaced from its beginning, and troubles are soon manifest. One built upon a firmer and more rational foundation may, indeed will, have a better chance of withstanding the shocks or disasters that eventually come. All families face the crisis of eventual dissolution by the normal process of aging and death.

A crisis has been characterized by Eliot²⁰ as a stage in any "interactional process" which has posed for a person or a group a problem that has proved insoluble within the framework of its usual habits, custom, or routines. Attention is thus suddenly focused upon the impasse. The situation has become one in which the person or group must either stop and think rationally about resolving the problem, or will grope and guess at random in an effort to escape the results. In the life of a family biological, emotional, economic, legal, and social elements are constantly interacting. To harmonize and adjust to them integrity is required and some degree of control on the part of each member. If either integrity or control is lacking in any given situation, a crisis can easily result.

Family crises may be either minor or major. Minor crises are likely to occur soon after marriage, when habits and routines may not have been solidly established. Meeting minor crises successfully will help to build a firm foundation for the meeting of major crises when and if they come. Minor crises are so individualized in a given family that it would be impracticable to list them here. Conflicts and tensions that are a part of everyday life lead to minor crises if not met and resolved with satisfaction to all concerned; in fact, they are the seeds of conflicts of major proportions if left unresolved.

²⁰ Eliot, Thomas D., contributor, *Family, Marriage and Parenthood*, Boston: D. C. Heath and Company, 1955, Chapter 2, p. 617.

Major crises may or may not cause a breakdown in the family. Illnesses and accidents that lead to expensive hospitalization and more-or-less permanent disabilities, economic failures and impoverishment, military service and war, imprisonment, desertion, divorce, and death are among the major crises that many families may have to meet. Any one of these demands a complete readjustment of the living pattern of the family and of the use of its resources.

Good management plays an important role in meeting shocks and disasters. It provides a framework for weighing values, making choices and decisions in using resources, and it makes possible readjustments with greater ease.

War presents unquestionably the most devastating crises families are called upon to face. It uproots traditions and sweeps away customary ways of living. It disorganizes the family and thus calls for adjustments and vast readjustments. The family as a group, and as individuals, pays a heavy toll since it must provide the man and woman power to prosecute the war on all fronts: fighting fronts, industries, and the supplying of material.

The most visible effect of war on family life is the disruption due to the scattering of family members. Father, son, daughter, and sometimes mother, are drawn into the armed forces. Women take over jobs and responsibilities previously carried by men, or they go into newly organized war services. Families follow fathers to war-service centers and to war-production centers. A family on the move finds little of the old to guide its life, and as a result its sense of security is often shattered. The family's real job becomes one of adapting and adjusting to life of a different kind and often to inadequate living conditions. Money income booms rapidly upward when defense or war industry competes for the labor supply or offers steady employment and extra pay for overtime. The demand for both labor and materials for such production reduces the supply of consumer goods and this, with the increase in incomes, causes greater competition for goods; and the increased competition inevitably leads to higher prices and higher living costs.

Another impact of war is upon the children of mothers who go out to work or who take part in war activities. The care of

the children poses a problem not always wisely solved. Often the younger children are left to the care of an older but still immature sister or brother; sometimes they are cared for in child-care centers; sometimes they are left at home alone. State or national legislation may make funds available for day-care centers for young children where citizens are interested and enterprising enough to take advantage of a grant for their community; or local communities can do much for themselves. In well-organized centers children are given excellent care. It is the teenagers, however, that become the particular victims of war activity. With their high emotional pitch, the psychology of war, and the greater freedom from adult supervision, they may react violently to the changed situation in which they find themselves. An alarming increase in juvenile delinquency and crime is the result.

Human beings, on the whole, have the power to rise above disaster. Those who have well-established, intelligent, and rational ways of meeting life's problems have more hope of transmuting disastrous experiences into higher values than have those who depend only on emotional groping. A family crisis can, and for many does, become the stimulus to the development and enrichment of character. That it can do so is perhaps the principal reward for a rational approach to the solving of family problems. During the depression of the early 1930's a college-trained homemaker whose family had suffered great economic loss was asked how things were going. "Fine!" she replied. "We are daily growing poorer but happier and happier."

When a crisis overtakes a family, it challenges the very best in all the members, but especially it challenges its quality of management. For if that quality is high or even good, the period of despair and readjustment can be made materially easier.

Home's Responsibility in the Community

The rise of women in social importance has placed upon them responsibilities to the larger social group, since rights and privileges always carry some obligations. The improvement in the technological environment, with its web of services, fortunately has lightened many time- and energy-consuming activities in the

home. Not all homemakers receive maximum usefulness from these offerings of the social group, because they do not plan and manage the resources at their disposal in a manner that gives them release. Thought and ingenuity are required to do this, and many homemakers do not have the spirit or even the desire to break from old methods or customary ways. Those who find time to assume outside responsibilities need courage and purposefulness to choose wisely from among the many possible non-domestic activities, in order not to waste energy and neglect their families. Frequently the husband is not too eager to have his wife carry outside responsibilities or take part in community affairs.

For long years the only acceptable extra-home activities for a homemaker were those connected with the church or philanthropic organizations; and these still make up a large part of the social contributions of many women. World War I saw women go out into community affairs, and between the wars the movement continued. Much of the welfare and protective legislation, such as health and sanitation laws, child labor laws, and child- and maternity-care laws, are due to the efforts of groups of women demanding safety and justice in these matters.²⁷ World War II and subsequent developments have speeded up the movement of women into community and world affairs.

Women's part in community and world affairs during war times, together with the wide spread of battle areas, pushed out the horizons of all families. Mothers and wives who previously may have been content with home and local community activities followed with understanding interest their sons and husbands to far-away places. These men in turn brought consciousness of the far reaches back into the local community. This broadening of viewpoint, coupled with the rapid development in communications, has made the entire world literally a family world. Every country is tied economically to every other country. Each economic and political move in international affairs affects in some way the family and its members. Each major social problem, from the election of a local school-board member to the vote a

²⁷ Mary R. Beard, *Women a Force in History*, New York: The Macmillan Company, 1946, Chapters 9-12.

senator or representative may cast on some labor issue, or the stand the secretary of state may take at the conference table, requires knowledge and understanding on the part of all. Young and old need to be informed in order that each may voice an intelligent opinion in the right place at the right time. In short, the demands of modern world citizenship weigh heavily upon the home. Social intelligence is sought from each homemaker—father and mother—since the family is the group through which all social experiences of its members are likely to pass.

Additional References

- Beasley, Christine, *Democracy in the Home*, New York: Association Press, 1954, Chapters 1-4.
- Becker, Howard, and Reuben Hill, *Family, Marriage and Parenthood*, Boston: D. C. Heath and Company, 1955, Chapters 5, 14, 21-23, 26.
- Cavan, Ruth Shonle, *The American Family*, New York: Thomas Y. Crowell Company, Fifth Printing, 1956.
- Dalton, Robert H., "Developing Control for Democratic Living," *Journal of Home Economics*, Vol. 39 (January, 1947), pp. 1-4.
- Folsom, Joseph K., *The Family and Democratic Society*, New York: John Wiley and Sons, 1943, Chapters 5-7.
- Gross, Irma H., *Potentialities of Women in the Middle Years*, Edited by Gross, East Lansing, Mich. State, Univ. Press, 1956.
- Kane, John J., *Marriage and the Family, A Catholic Approach*, New York: The Dryden Press, 1952.
- Krech, Hilda Sidney, *The Other Side of the Day*, New York: Alfred A. Knopf Company, 1958.
- Kyrk, Hazel, *The Family in the American Economy*, Chicago: the Chicago University Press, 1953.
- Landis, Paul H., *Our Changing Society*, Boston: Ginn and Company, 1942, Chapters 9 and 17.
- Landis, Paul H., *Your Marriage and Family Living*, New York: McGraw-Hill Book Company, 1946, Chapter 2.
- Mitchell, Agnes W., "Automation From a Woman's Standpoint," *Journal of the American Association of University Women*, Vol. 49 (March, 1956), p. 172.
- Neugarten, Bernice L., "Social Change and Our Aging Population," *Journal of the American Association of University Women*, Vol. 50 (January, 1957), pp. 67-70.
- Ogburn, W. F., and M. Nimkoff, *Technology and the Changing Family*, Boston: Houghton Mifflin Company, 1955, Chapter V.

Scheinfeld, Amram, *You and Heredity*, New York: Frederick A. Stokes Company, 1938.

Sheldon, Henry D., *The Older Population of the United States*, New York: John Wiley and Sons, 1958.

Toynbee, Arnold J., *Civilization on Trial*, New York: Oxford University Press, 1948.

1956 Handbook on Women Workers, U. S. Department of Labor, Bulletin 261.

Work in the Lives of Married Women, National Manpower Council, New York: Columbia University Press, 1958.

Gross, Irma H., "Work in the Lives of Married Women," *Journal of Home Economics*, Vol. 51 (Jan., 1959), 30-31.

Lee, Dorothy, "The Individual in a Changing Society," *Journal of Home Economics*, Vol. 52 (February, 1960), 79-82.

May, Elizabeth Eckhardt, and Susan Pike Corcoran, "Freshman Interview 'Working Wives,'" *Journal of Home Economics*, Vol. 51 (June, 1959), 464-466.

Newcomer, Mabel, *A Century of Higher Education for American Women*, Harper & Brothers, 1959, Chapters 11 and 17.

Smuts, Robert W., *Women and Work in America*, New York: Columbia University Press, 1959.

Sturm, Mary Mark, "When Mothers Work," *Journal of Home Economics*, Vol. 51 (May, 1959), 329-331.

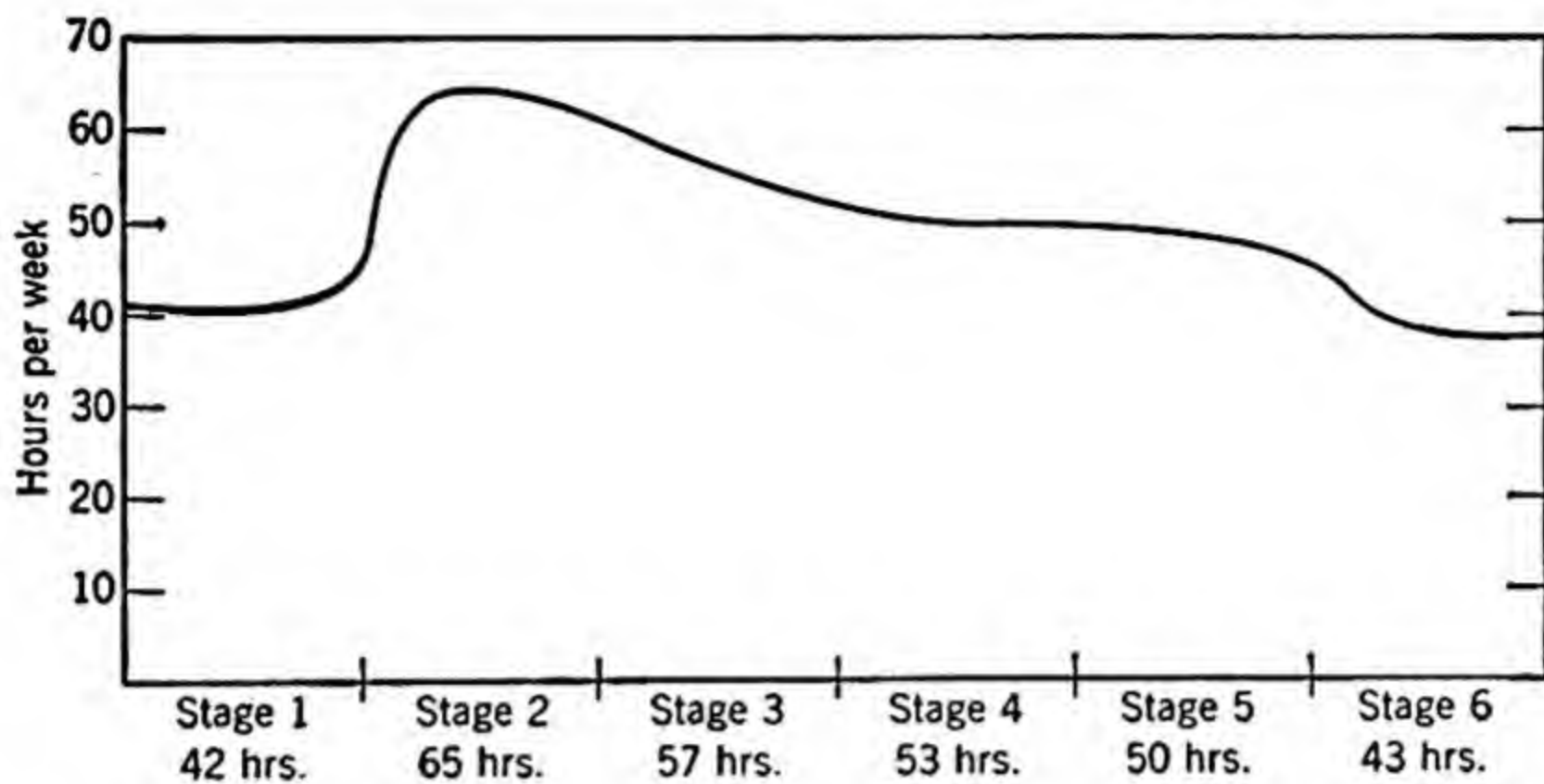


Figure 4. Time demands upon the homemaker during the different stages of the family life cycle. (Based on unpublished data, Bureau of Home Economics, U. S. Dept. Agr.)

What guides can homemakers use in planning and evaluating the use of their time? How do other homemakers use their time? Which homemaking activities are most time-consuming? How much and what kind of help do other homemakers have? How do other homemakers spend their leisure time? How do homemakers who are regularly employed outside their homes meet their homemaking responsibilities?

These are questions asked by homemakers who are trying to make the most effective use of their time. Some of these questions may be answered by studies that have been made to determine the use of time by homemakers.

The time patterns of farm and city homemakers were first shown in a study made by the Bureau of Home Economics in the late 1920's. This study was based on weekly reports of time expenditures kept by farm and city homemakers. The farm homemakers were representative of the farm homemakers with whom the extension service was in touch. The city homemakers represented the moderately well-to-do housewife of the business and professional class. These findings have been condensed in Table 1 and will be used in making comparisons with later studies to show how various changes over the years have affected the homemaker's use of time.

TABLE 1. DISTRIBUTION OF THE HOMEMAKER'S TIME DURING THE WEEK *

Activity	Time Spent by—				Help Received by—			
	Farm Home-makers		Home-makers in Cities under 100,000		Farm Home-makers		Home-makers in Cities under 100,000	
	Hr.	Min.	Hr.	Min.	Hr.	Min.	Hr.	Min.
Homemaking								
Purchasing and management	2	10	4	40	—	15	—	16
Care of family	3	55	10	18	—	38	5	58
Preparing meals	15	14	10	49	1	45	5	5
Clearing away meals	7	36	5	11	2	17	5	41
Cleaning and care of house	9	37	7	38	3	11	7	48
Laundering	5	16	3	18	—	41	3	38
Mending	1	34	1	39	—	9	—	11
Sewing	3	59	2	19	—	8	—	6
Other homemaking	2	19	3	48	—	11	—	22
Total homemaking time	51	40	49	30	9	15	29	5
Farm or other work	9	35	2	4				
Homemaker's working week	61	15	51	34				
Sleep and rest	61	36	61	8				
Leisure	27	48	36	24				
Personal care	5	50	8	3				
Eating meals	9	13	9	20				
Other activities	2	28	1	31				
Average size of household (persons)	4.3		4.1					

* Unpublished data, Bureau of Home Economics, U. S. Dept. Agr.

The figures in Table 1 show that the total time spent in homemaking activities by the two groups of homemakers is surprisingly similar. The farm homemakers spent an average of almost 52 hours a week, or about 7.4 hours a day, whereas the city homemakers studied averaged 49½ hours a week, or about 7 hours a day. On the other hand, the length of the average working week of the two groups varied considerably. The farm homemakers' working week averaged 61 hours, whereas the total

time spent in work by these city homemakers was $51\frac{1}{2}$ hours a week.

The distribution of time among the different homemaking activities in the rural and urban households differs in many ways. The farm homemakers spent more time than the city homemakers in most of the activities. Both groups of homemakers spent the largest amount of their time in preparing meals and clearing away and in the care of the house. Because of their greater use of help in housework, the city homemakers spent fully twice as much time in the care of children as the rural homemakers.

A marked contrast appears between the amount of help received by the two groups of homemakers. The farm homemakers had only 9.3 hours of help a week, and most of this was given by members of the family. These city homemakers received an average of 29 hours of help a week, most of which was given by paid workers. In spite of this difference, the two groups used their help in much the same way.

The farm homemakers distributed their time during the week quite differently from the city homemakers. They spent 61 hours in work, $61\frac{1}{2}$ hours in sleep and rest, and about 45 hours in leisure activities, personal care, and eating. The city homemakers studied averaged $51\frac{1}{2}$ hours in work, 61 hours in sleep and rest, and 54 hours in other activities.

Both groups of homemakers averaged about 9 hours out of the 24 in sleep and rest. They also spent similar amounts of time in eating meals. The urban homemakers spent slightly more time in dressing and personal care than the rural homemakers, but the greatest difference occurs in the time given to leisure activities by the two groups. The urban homemakers had about ten more hours a week to spend in recreational activities than the farm homemakers. It is interesting to note that both groups spent about one-half their leisure time in reading and informal social life.

The study made by Warren of the expenditure of time in 497 New York farm homes, based on interviews, shows that the average time used for homemaking activities was about 52 hours

TABLE 2. HOMEMAKERS' USE OF TIME ON ONE WEEKDAY *
(95 farm, 102 city, 53 employed city homemakers, New York, 1952)

Activities	Type of Homemaker			
	Farm	City	Employed, City	All
	Hours			
Total work	9.0	8.1	11.5	9.2
Homemaking	7.6	7.4	4.1	6.8
Farm work	1.0	0.0	†	0.4
Paid employment	†	0.3	6.8	1.6
Other work	0.4	0.4	0.6	0.4
Sleeping, resting	8.7	8.4	7.8	8.4
Personal care	1.9	2.0	1.7	1.9
Community activities	0.4	0.6	0.2	0.4
Other leisure activities	3.5	4.5	2.6	3.7
Unaccounted-for time	0.5	0.4	0.2	0.4
Total	24.0	24.0	24.0	24.0

* Elizabeth Wiegand, *Use of Time by Full-Time and Part-Time Homemakers in Relation to Home Management*, Cornell Univ. Agr. Exp. Sta. Bul. 330, 1954, pp. 13 and 16.

† Less than 5 minutes.

for the week. When the time used for farm and other work was added to this, it was found that the homemakers worked an average of about 61 hours during the week. They spent the largest amount of their time on food preparation and clearing away and care of the house. The help they received averaged 11½ hours during the week, and most of it was given by members of the family. Their distribution of time during the week was very similar to the farm homemakers reported in the Bureau of Home Economics study. They spent about 61 hours in work, 63 hours in sleep and rest, and about 42 hours in leisure and personal activities.^a

The use of time by full-time and part-time homemakers in New York State on one weekday was studied by Wiegand in 1952 (Table 2). The groups included both farm and city home-

^a Warren, *op. cit.*, pp. 19-55.

makers, and city homemakers who were regularly employed outside their homes. The farm homemakers reported working an average of 9 hours on the weekday preceding the interview, the city homemakers 8 hours, and the employed city homemakers 11½ hours. Both farm and city homemakers used about 7½ hours for homemaking, while the employed city homemakers used only about 4 hours. The employed city homemakers, who spent about 7 hours in paid employment, adjusted their time patterns to meet the outside demands. With the longer working day, they reported less time for sleeping, slightly less time for personal care, and much less time for other leisure and community activities than the full-time farm and city homemakers. Both the farm and city homemakers divided their time equally between work and rest. The farm homemakers spent 9 hours in each activity, and the city homemakers averaged about 8 hours. Both groups spent about 6 hours of the day in personal care, and in community and leisure activities.

TABLE 3. HOMEMAKERS' USE OF TIME FOR HOMEMAKING ON ONE WEEKDAY *

(95 farm, 102 city, 53 employed city homemakers, New York, 1952)

Homemaking Activities	Type of Homemaker			
	Farm	City	Employed, City	All
	Hours used by homemakers			Hours
Food preparation	1.8	1.6	1.2	1.6
Food preservation	0.1	0.0	0.0	†
Dishwashing	1.1	1.0	0.7	0.9
Care of the house	1.4	1.6	0.8	1.4
Care of clothes	1.7	1.6	0.8	1.5
Care of family members	0.7	1.1	0.3	0.8
Marketing, records	0.8	0.5	0.3	0.6
	—	—	—	—
All homemaking	7.6	7.4	4.1	6.8

* Same source as Table 2.

† Less than 5 minutes.

The way these three types of homemakers used their time for homemaking is most interesting. They all spent about the same amount of time for food preparation (Table 3). The farm and city homemakers used similar amounts of time in the various homemaking activities. The city homemakers gave slightly more time to the care of family members than the farm homemakers. The employed city homemakers used much more time for food preparation than any other single activity. If the time for preparing food and dishwashing is totaled, it accounts for nearly half the time they spent in homemaking. Equal amounts of time were given to caring for the house and for the clothes. Little time was given to care of family members or in marketing and keeping financial records. Over 60 percent of the employed homemakers were in small households of two or three persons and many of the children were between the ages of 10 and 17.

The records for the farm homemakers in the Wiegand time study of 1952 were collected in the same area that Warren had surveyed in 1936. In both reports the homemakers' activities were classified in the same way.

A comparison of the farm homemaker's use of time in the two studies shows that between 1936 and 1952 the amount of time used for care of the house decreased from 33 to 18 percent and for food preparation from 29 to 24 percent, possibly because there were more furnaces in 1952 and because equipment was better and commercially prepared foods were more plentiful.

The proportion of time used for care of clothes and for marketing and records increased noticeably, from 14 to 22 percent and 6 to 11 percent, respectively. The increase in time for the care of clothes may reflect homemakers' higher standards of cleanliness made possible by better laundry facilities. The change in the amount of time for marketing was due probably to better recording of homemakers' time for this task.

The time for dishwashing and care of the family members increased only slightly. There was little change in the average amount of homemaking time used by farm homemakers. In 1936 it was 8.1 hours and in 1952 it was 7.6 hours.

Twenty-two of the farm homemakers who had been inter-

viewed by Warren were interviewed again. Their records showed little difference between the time spent in homemaking activities between 1936 and 1952. The greatest differences occurred in farm work and leisure activities, the former decreasing and the latter increasing, as might be expected as the homemaker grows older.⁷

Cowles and Dietz conducted a study in 1953 to determine how the many changes that have taken place in the modern home have affected the time used in homemaking. Records of a week's time were kept by 85 Wisconsin farm homemakers. The average time devoted to homemaking activities by the homemakers was 52 hours, 46 minutes for the week. In addition, 8 hours were devoted to farm work or other business or outside employment, making a total working week of 60 hours, 46 minutes. Other members of the family spent 7 hours, 44 minutes in various types of homemaking activities.

When compared with earlier studies, the Wisconsin farm women used less time in food preparation and clearing away than homemakers in the earlier studies. Mending and sewing also showed some decrease. On the other hand, the time spent during the week on purchasing and management and on care of the family increased.⁸

A study made by Van Bortel and Gross of 23 upper-lower and 23 upper-middle socio-economic groups of homemakers living in one Michigan city was reported in 1954. One of the purposes of this study was to investigate the similarities and differences among the two groups in regard to their use of time.

Daily time records were kept by the homemakers for a week, and the time spent in each of six mutually exclusive major roles was computed. The roles were:

1. Manager: Managerial activities carried on by homemaker alone.
2. Housewife: Housekeeping activities carried on by homemaker alone.

⁷ Jean Davis, *A Comparison of the Use of Time by Homemakers in 1936 and 1952*, New York State College of Home Economics at Cornell University, New York, 1956, unpublished thesis, Cornell University.

⁸ May L. Cowles and Ruth P. Dietz, "Time Spent in Homemaking Activities by a Selected Group of Wisconsin Farm Homemakers," *Journal of Home Economics*, Vol. 48 (January, 1956), pp. 29-35.

3. Family member: Activities in which mother, father, and one or more children participate.

4. Mother: Activities shared by mother and one or more children.

5. Wife: Activities shared by husband and wife.

6. Individual: Activities carried on by homemaker without other family members present, exclusive of housekeeping duties.

The findings are presented in Table 4. An examination of the figures indicates two outstanding trends: the marked similarity between the two groups in their use of time and the large amount of time classified as individual. The latter included the time spent in sleep.

The time patterns in housekeeping for the two groups are similar to the previous studies reported. Food preparation accounted for the largest amount of time, while house care and clearing away after meals were the next most time-consuming activities.

TABLE 4. HOW TWO GROUPS OF HOMEMAKERS USED THEIR TIME DURING ONE WEEK *

(23 homemakers in upper and 23 in lower socio-economic group)

Role	Average per Day, Hours		Entire Week			
			Hours		Percent	
	Lower Group	Upper Group	Lower Group	Upper Group	Lower Group	Upper Group
Manager †	0.5	0.7	3.4	5.0	2.0	3.0
Housewife	4.4	4.9	31.1	34.0	18.5	20.2
Family member	2.0	2.3	14.2	16.1	8.5	9.6
Mother	2.1	1.8	14.4	12.7	8.5	7.6
Wife	1.6	2.0	10.8	14.0	6.5	8.3
Individual	13.4	12.3	94.1	86.2	56.0	51.3
Total	24.0	24.0	168.0	168.0	100.0	100.0

* Dorothy Greey Van Bortel and Irma H. Gross, *A Comparison of Home Management in Two Socio-Economic Groups*, Mich. State College, Agr. Exp. Sta. Tech. Bul. 240, 1954, p. 12.

† Differences in time spent in this role were significant at the 0.05-percent level.

The role of the individual included day and night rest, work for pay as well as personal activities. The most significant difference appeared in the amount of daytime rest. The lower group averaged about 25 minutes a day, the upper group 11 minutes.

The difference between the hours per day devoted to personal activities (eating, grooming, entertaining, reading, club activities, pursuing hobbies; driving, watching television, listening to the radio) was significant. The lower homemakers averaged 3 hours or less a day, while the upper homemakers averaged more than 3 hours. The upper group spent more time in school activities; both groups spent about the same amount of time in church activities. There were highly significant differences between the two groups in time spent in reading, hobbies, and club activities. It is interesting to compare these figures with the hours spent in leisure activities by the city homemakers reported in other studies. More time was spent in reading by the earlier homemakers. The development of radio and television programs is probably responsible for the change to fewer reading hours.

According to recent surveys the homemaker's use of leisure time shows a decided increase in the time used in television viewing. As a general rule women spend more time watching television than do other members of the family.⁹

Comparison of Time Used for Homemaking

A comparison of the homemaker's use of time in the time studies made by the Bureau of Home Economics in the late 1920's, by Warren in 1936, by Wiegand in 1952, and by Cowles and Dietz in 1953 shows that the results are remarkably similar. The weekly time spent by farm homemakers in homemaking activities varied from 51 hours, 40 minutes in the Bureau study to 52 hours, 46 minutes in the Wisconsin study, a difference of about 1 hour. The difference was slightly less between the Wisconsin study and the Warren and Wiegand studies.

⁹ Leo Bogart, *The Age of Television*, New York: Frederick Ungar Publishing Company, 1956, p. 68.

Although the total homemaking time of the farm homemakers in the four studies was about the same, some differences appeared in the distribution of time among various homemaking activities that may be indicative of certain trends.

Similar trends are apparent when the city homemakers' use of time in the study made by the Bureau of Home Economics is compared with the results of the later studies made by Wiegand in 1952 and by Van Bortel and Gross in 1954. Changes that have taken place in homemakers' working time during the years between the studies show:

1. A decrease in the amount of time used in food preparation.
2. A large decrease in time used for care of the house.
3. A considerable increase in time used for care of clothes.
4. An increase in time used on purchasing and management.
5. Some increase in time given to care of the family.

In all of these studies of the time patterns of homemakers, food preparation and clearing away ranked first and care of the house ranked second in the amount of time they absorbed weekly.

Time Patterns of Homemakers

A graphic picture of the weekly time patterns of farm homemakers, and of city, and employed city homemakers living in a small city with a population of over 35,000, is given in Figure 5. This chart shows where the homemaker's time goes and which activities are the most time-demanding. Although the use of time will differ from home to home, these time patterns are a good guide for homemakers who wish to evaluate and analyze their own time expenditures.

A similar chart may be made by any homemaker who is willing to keep a daily or weekly time record of her own homemaking and other activities. Then by comparing her chart with this one she may see where her time costs may be reduced or where more time might well be used.

Questions such as the following may help in checking one's own time-spending habits and practices:

Do I spend enough time in planning my work?

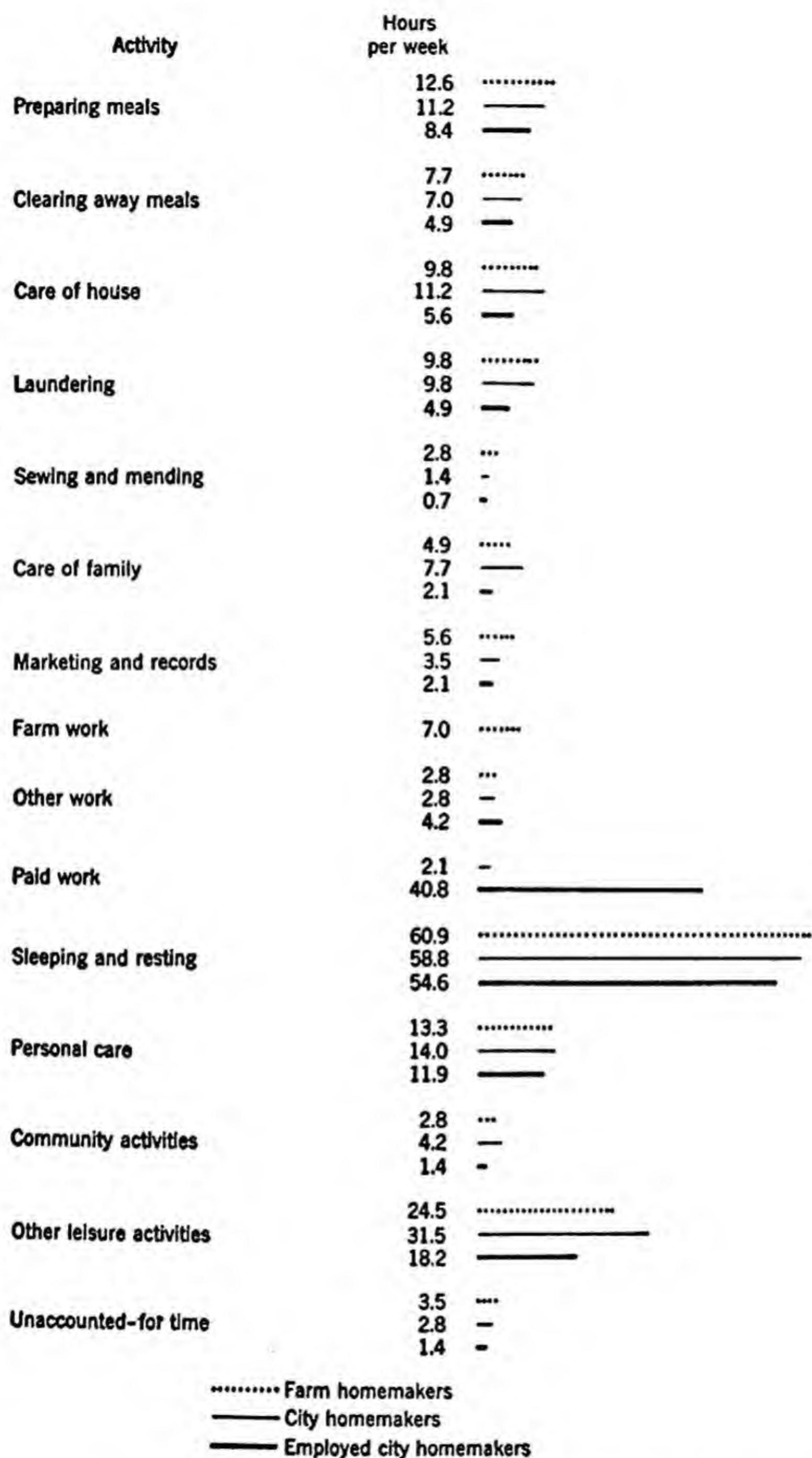


Figure 5. Weekly time patterns of farm, city, and employed city homemakers. (Elizabeth Wiegand, *Use of Time by Full-Time and Part-Time Homemakers in Relation to Home Management*, Cornell University, Agr. Exp. Sta., Memoir 330, 1954.)

Am I spending too much time in homemaking activities?

Have I worked out a suitable balance between time spent in work, rest and sleep, and in personal, family, and community activities?

Are other members of the family sharing sufficiently in the homemaking activities?

Does my attitude toward homemaking responsibilities or any phase of homemaking affect my use of time?

Am I spending my time on things that mean the most to the family?

Do I spend enough time with members of the family?

What improvements can I make in the use of my time?

Planning the Use of Time

Managing time involves both making plans and carrying them out. A time plan shows what one expects to do in a given period of time, such as a morning or an afternoon, or possibly during a whole day or week. It also indicates the sequence of the various activities and the time allowed for each one.

Most homemakers follow some sort of time plans. The Middletown study made by Robert and Helen Lynd mentioned three types of time managers: a small group for whom housework is a minor consideration; a large group who, by careful management, fitted most of their work into the morning and an hour or two in the afternoon with many afternoons and evenings relatively free for the children, their husbands, social life, and community activities; and a third group, also a large one, for which each day was a nip-and-tuck race to accomplish the essential tasks between morning and bedtime, with occasional afternoons and evenings free only by planning for them in advance.^{10, 11}

The success or failure of these groups of homemakers is due largely to their approach to their homemaking responsibilities. Homemaking and managerial skills can be learned if one is interested and willing to work. Carefully thought-out time and

¹⁰ Robert S. and Helen M. Lynd, *A Study in Contemporary American Culture*, New York: Harcourt, Brace and Co., 1929, p. 169.

¹¹ Robert S. and Helen M. Lynd, *Middletown in Transition*, New York: Harcourt, Brace and Co., 1937, Chapter V.

activity plans are useful tools in saving time and energy and relieving the tensions of indecision and uncertainties.

Time and Activity Plans

Part of the usefulness of a time plan lies in the fact that it leads one to think through many work problems in advance. This does away with indecisions and frees the mind for solving other problems and meeting new situations that are constantly arising. Learning to make and carry out daily time plans gradually establishes thought patterns that flow along automatically. Getting breakfast soon becomes a routine task during which a dozen-and-one decisions can be made that most families must make at the start of the day. Such automatic methods of work promote speed and efficiency and free time for other activities.

Bases for Family Planning

In order to build an efficient and workable plan, each homemaker, with the help of her family, will need to decide what activities should be carried out each day, what ones during the week, what the most important ones are in case any must be left out, and what special and seasonal tasks should be fitted into the daily and weekly plans. She will also need to think through the time each task can best be done. Although many of the daily and weekly tasks remain much the same throughout the year, the special and seasonal tasks and recreational activities are constantly changing. Each of these makes different time and energy demands which may result in other changes in the plans.

In most homes the time for doing certain tasks is definitely fixed by some condition outside the home or some special demand within it. The husband's or children's hours of work, or the wife's, if she is employed, and the hours that children must go to school usually determine the time that breakfast must be prepared and served, or when lunches must be put up, or when members of the family must be taken to school or work. Although the time for certain tasks is relatively fixed, some tasks do not require the same rigid adherence to a schedule.

Each member of the family may also have individual definite-time tasks or activities. Some of these may last only a short

time, whereas others may extend over a long period. Music lessons, scout work, school, and outside activities make definite time demands. All these activities must be considered, since they affect not only the homemaker's use of time but the amount of help that other members of the family can give about the house.

The distribution and sequence of the other homemaking activities will of course depend on the time of day these fixed tasks must be done and also on the amount of time they take. All definite-time tasks shape the daily and weekly time and activity pattern in every home.

The time that help is available frequently determines when certain tasks can best be done. Jobs that require several workers must often be fitted into the plan at a time when the workers are free. When outside help is employed, the time the worker's services are available fixes the time for doing many tasks.

Time and Activity Patterns

The daily and weekly time and activity patterns in all homes reflect the interests, work habits, and personal needs of the homemaker and her family. For instance, many homemakers who have heavy demands on their time and energy over the weekend may find it easier to do other tasks on Monday and wash and iron on Tuesday and Wednesday. Other homemakers who are interested in outside activities may prefer to do their washing and ironing on Monday, or on Monday and Tuesday, in order to free large blocks of time on two consecutive days. Many homemakers who do not have sufficient energy to carry the entire homemaking load solve their problem by having the laundry done outside or by buying all their baked goods.

The distribution of recreation time varies from week to week. Sometimes, it may seem desirable to plan for some recreation each day. At other times, it may be an advantage to omit most of the recreation time several days of the week in order to have longer periods for some of the more time-demanding activities, such as all-day meetings away from home, a movie, a game of golf, a picnic, or a weekend trip.

The work habits of the homemaker and the type of work being done influence the amount of rest needed during the day. For some a number of short rest periods may seem best; others may get sufficient rest and relaxation by a change of work.

Peak Loads

In most homes there are periods when work and activities tend to pile up. These crowded periods, or peak loads, may occur at certain times of the day, week, month, or season.¹² For some homemakers the time of preparing dinner and getting the children off to bed may be a daily peak load; washing and ironing a weekly peak load; cleaning windows a monthly peak load; food preservation a seasonal peak load.

In her study of the use of time by Oregon farm homemakers, Wilson reported that the peak load of the year for the seasonal activities is midsummer, with a secondary peak at holiday time. The seasonal activities included farm work, food preservation, care of house surroundings, and care of fires.¹³

Clark and Gray, in their study of the routine and seasonal work of Nebraska farm women, found that the peak load for family sewing came during the months of February, March, and April, while the peak loads for farm work and food preservation were between May and September.¹⁴

In all homes there is less danger of periods of overloading if the homemaker plans to distribute the tasks and activities over the week, so that time and energy demands are about the same for each day. Alternating the heavy and more fatiguing tasks with the lighter, less-fatiguing ones and planning only comfortable periods of heavy work at one time helps to distribute the energy cost during the day.

A yearly calendar of all the special and seasonal activities, together with vacations, holidays, and anniversaries, is a great help. It enables one to look ahead and plan when and where

¹² Irma H. Gross and Elizabeth Walbert Crandall, *Management for Modern Families*, New York: Appleton-Century-Crofts, 1954, pp. 228-229.

¹³ Maud Wilson, *Use of Time by Oregon Farm Homemakers*, Ore. Agr. Exp. Sta. Bul. 256, 1929, pp. 31-34.

¹⁴ M. Ruth Clark and Greta Gray, *The Routine and Seasonal Work of Farm Women*, Nebr. Agr. Exp. Sta. Bul. 238, 1930, pp. 9-24, 37.

these various activities can and must be fitted into current plans. Long-time planning of this sort keeps tasks from piling up and eliminates the nervous strain and fatigue which come from carrying an excessive load at one time and from working under pressure.

Sequence of Activities

The sequence, or order, in which activities follow one another in the day's schedule is in part determined by the definite-time tasks, in part by the relationships of tasks to each other, and in part by the persons involved. All activities should be arranged so that they may be carried out with the least amount of effort and tension. Grouping or dovetailing related tasks that naturally flow along together and are carried on in the same area of the house saves time and motions. Combining tasks which require the use of the same tools also reduces the time and energy needed for assembling equipment and materials and for cleaning up and putting them away. Each homemaker must determine the best order for her individual situation. By studying one's work habits and trying different plans, the one which saves the most walking and most interruption will usually be found.

Time Needed for Different Activities

Estimating the amount of time each activity or group of activities will probably take is important in making a workable plan. Without this information, it is difficult to arrange a closely knit plan or to decide how much work can comfortably be done each day. The time-use patterns of homemakers shown in Tables 2 and 3 and in Figure 5, when supplemented by personal observations, may be used as a basis for making time estimates for many tasks. In all cases sufficient time should be allowed to do each task satisfactorily and easily.

Time for Emergencies

Weekly plans are sometimes difficult to follow since unplanned or unexpected interruptions and demands arise which affect the time and work of a homemaker. Out-of-town guests may drop

in and spend the night, an aching tooth may require several trips to the dentist, a bad cold may keep one of the children in bed, a clogged sink may delay dishwashing and require the attention of a plumber, the appearance of moths in a closet may mean extra cleaning and spraying, a costume may need to be made for a school play, a special meeting may be called which requires the attendance of both homemakers—all unexpected, time-taking, as well as work-making demands.

Such emergencies can best be met by allowing some free time in the daily time plans. "To meet emergencies in the family . . . takes flexibility in personal time patterns, shift in management plans, and a resilience to recover when the trying hours are done."¹⁵

Division of Tasks

Deciding who will do the various tasks is not difficult if all members of the family have some share in making the plans. The main problem is to divide the work so that each one will carry a fair share of responsibility and at the same time get experience in doing all kinds of tasks about the home.

Guides in Making Plans

The following suggestions will serve as a guide in making time and activity plans:

- Plan to take care of important things first.

- Arrange the work in the sequence best suited to family needs, interests, work habits, and free time.

- Plan time-saving combinations of activities whenever possible.

- Allow sufficient time to do each task satisfactorily and easily.

- Plan some time for personal recreational activities as well as for family group activities.

- Distribute tasks so that each member of the family will carry a fair share of responsibility.

- Make the plan flexible enough so that it can be adjusted to meet emergencies, unexpected interruptions, or a shift in daily or weekly plans.

¹⁵ Bernice Milburn Moore, *op. cit.*, p. 760.

Steps in Making a Daily and Weekly Time and Activity Plan

A workable time and activity plan must be built step by step to fit the needs of a particular family. Conditions in no two homes are the same. Plans for a family with young children will differ greatly from those for a family with teen-age children. Some homemakers, such as farmers' and doctors' wives, must plan to dovetail their work with that of their husband's occupation. When this is the case, time for interruptions and unexpected demands must be planned in advance, since these demands are a part of the day's activities. Although the details of time and activity plans will differ in each household, the steps in making the plans are much the same. The four steps in plan-building are discussed below and shown in detail on pages 122 and 123.

The *first step* is to list the everyday, weekly, special, seasonal, and recreational activities of the family.

The *second step* is to make a plan for everyday, or routine, tasks. By underlining or starring the definite-time tasks one has a skeleton plan or work pattern around which to build the rest of the plan. Such duties as preparing and serving meals, putting up lunches, taking members of the family to school or work usually appear here. After the daily tasks are allocated, blocks of free time will be left in the morning and afternoon for weekly tasks and activities.

One of the simplest methods of making the daily time plan—one that is used by experienced home managers who have their plans well in mind—is to assign certain amounts of time to a group of tasks. For instance, all the routine tasks connected with the preparation and serving of meals and the daily cleaning tasks may be timed as one group, and the weekly and special or recreational activities of the morning and afternoon timed in two large groups. By this method of grouping and timing, one gets the habit of doing a definite amount of work during certain hours of the day, or of thinking of accomplishments in terms of large blocks of time, rather than of small units for each individual task.

The *third step* is to complete the daily and weekly plan. In

this part of the plan, the weekly, special, and seasonal tasks and activities are fitted into the blocks of free time in the daily plan. The days of the week that best meet the needs of the household, the work habits of the homemaker, and the free time of the workers are to be considered in making the assignments.

The *fourth step*, which is deciding who will do the different tasks, calls for group discussion and planning. This may be done along with Steps II and III if one wishes, since these decisions are usually made when the order and time of work are being determined.

This type of plan is simple to make, easy to remember, and practical to follow.

Written Time Plans

Plans are often more useful if written down. For experienced time managers a brief outline of the day's work or a certain project may be sufficient. Those with less experience or those who have difficulty in getting work done may find a more detailed plan a greater help.

In a way, a written plan forms the framework of time in which the various activities of the family take place. It is one means of helping the homemaker locate herself in her environment with reference to time. Steps 3 and 4, as they appear on page 123, furnish the framework of time in which the daily and weekly activities must be fitted. Some of these tasks follow a daily cycle that is controlled by the needs and work of the family. When children are small and require a great deal of care, the daily time plan may become very crowded with activities. These are the nip-and-tuck days for many homemakers.

Time and work plans will show which days carry peak loads of work and how the work may be distributed more evenly. Successful revision or adjustment is difficult without such a guide. There are three chief advantages of a written plan: (1) it serves as a time and work guide during a busy day; (2) it helps one to analyze and evaluate one's daily time practices; (3) it serves as a check on time-spending patterns.

A carefully prepared written plan soon changes to a mental pattern and becomes part of the homemaker's everyday life,

STEPS IN MAKING A DAILY AND

Step I

List all family activities. These might include:

Everyday Tasks and Activities

Daily adjustment of plans.
Taking care of children.
Taking care of invalids.
Planning meals.
Preparing and serving meals.
Dishwashing.
Packing school lunches or dinner pails.
Baking cakes, pies, cookies, bread, etc.
Preparing baby's food.
Care of house.

Bedmaking.
Care of fires.
Rest and personal care.
Recreational activities.
Social activities.
Feeding and bathing the baby.
Care of pets.
Unexpected tasks.
Farm tasks.
Any others.

Weekly and Special Tasks and Activities

Laundry—washing and ironing.
Mending and sewing.
Thorough cleaning of the house.
Special cleaning tasks.
Shopping and ordering.
Special cooking and baking.
Preparing special meals.
Washing windows.
Meetings, clubs, etc.

Trips to doctor, dentist, etc.
Banking and account-keeping.
Recreational activities.
Repairs on equipment and house.
Visiting neighbors.
Doing errands away from home.
Helping members of the family.
Farm tasks.
Any others.

Seasonal Tasks and Activities

Planning and directing vacation activities
of children.
Preparation for holidays.
Preparation for birthdays, etc.
Cleaning.
Storing winter clothing, etc.

Food preservation.
Sewing.
Gardening—vegetable and flower.
Care of yard.
Screens and storm windows.
Any others.

WEEKLY TIME AND ACTIVITY PLAN

Step II

Make a plan of everyday tasks.
Star the definite-time tasks.

Fit the other daily tasks into the skeleton plan in the order and at the time that seems best, leaving blocks of time for weekly, special, and seasonal tasks and activities. Revise and rearrange if necessary.

- Review and adjust day's plans.
- * 6:30- 7:30 Prepare and serve breakfast.
 - 7:30- 9:00 Clear table, wash dishes. Do kitchen work, start lunch. Daily cleaning, straightening, and bed-making.
 - 9:00-11:00 Weekly tasks and activities.

- 11:00-11:15 Rest.
- *11:15-12:00 Prepare and serve lunch.
- *12:00-12:45 Lunch.
- 12:45- 1:30 Wash dishes, do kitchen work, start dinner.
- 1:30- 2:30 Rest and dress.
- 2:30- 5:15 Weekly tasks and activities.

- * 5:15- 6:00 Prepare and serve dinner.
- * 6:00- 6:45 Dinner.
- 6:45- 7:15 Wash dishes, etc.
- 7:15- Reading, visiting with family, recreational activities, or some kind of work. Put living room in order before retiring.

Steps III and IV

Complete the daily and weekly plan.
Plan and decide who will do each task.
Fit the weekly, special, and seasonal tasks and activities into the blocks of free time left in the daily plan on the days that best meet the needs of the household and the time of members of the family.

- Review and adjust day's plans.
- * 6:30- 7:30 Prepare and serve breakfast.
 - 7:30- 9:00 Clear table, wash dishes. Do kitchen work, start lunch. Daily cleaning, straightening, and bed-making.
 - 9:00-11:00 Weekly tasks and activities.

Mon. _____
Tues. _____
Wed. _____
Thurs. _____
Fri. _____
Sat. _____
Sun. _____

- 11:00-11:15 Rest.
- *11:15-12:00 Prepare and serve lunch.
- *12:00-12:45 Lunch.
- 12:45- 1:30 Wash dishes, do kitchen work, start dinner.
- 1:30- 2:30 Rest and dress.
- 2:30- 5:15 Weekly tasks and activities.

Mon. _____
Tues. _____
Wed. _____
Thurs. _____
Fri. _____
Sat. _____
Sun. _____

- * 5:15- 6:00 Prepare and serve dinner.
- * 6:00- 6:45 Dinner.
- 6:45- 7:15 Wash dishes, etc.
- 7:15- Reading, visiting with family, recreational activities, or some kind of work. Put living room in order before retiring.

something to work by, yet adjustable to the everyday needs of the family.

Some homemakers and their families prefer to write their plans on a kitchen blackboard, where they can be easily seen and quickly adjusted. Others prefer to write them on paper and hang them on the kitchen wall. Plans kept in written form may be saved for reference in future planning and in checking the time used for seasonal and special activities.

Example of a Written Plan

The plan on page 125 shows how one family used the four steps in plan building in making its daily and weekly time and activity plans. The family consists of father, mother, a boy of 13, a girl of 8, and a grandmother who is able and likes to carry some homemaking responsibilities. The children come home from school at noon; the father, who is a businessman, is away at noon. They live in a modern seven-room house in a large suburb of a midwestern city. The house is heated with gas and the cooking fuel is also gas. The electrical equipment consists of an automatic washer and clothes dryer, vacuum cleaner, and iron.

The daily, weekly, special, and seasonal tasks and activities for the week have been listed, and each member of the family has checked off the tasks he or she expects to do each day. It will be noticed that the plan for each day is checked over by the homemaker, discussed with the family, and adjusted to meet the necessary changes. This prevents any misunderstanding and confusion. Such a plan is easily made and quickly changed from day to day or from week to week.

Time Plans for the Employed Homemaker

For the homemaker who is carrying on two full-time jobs, along with a possible third, child rearing, Charlotte Adams offers many valuable suggestions in her book, *Housekeeping After Office Hours*. She points out the necessity and value of a flexible schedule for running a home and includes sample schedules for daily, weekly, and occasional tasks. She suggests for working

EXAMPLE OF PLAN BUILDING BY A FAMILY

Daily and weekly time and activity plan	Mother	Father	Grand-mother	John	Sue
Check over and adjust day's plans	✓	x			
Care of fires, waste, yard		x		Δ	
6.30-7.00 Prepare breakfast	✓				
7.00-7.30 Serve breakfast	✓				
7.30-9.00 Wash dishes and do kitchen work	✓		○		
Bedroom work	✓		○	Δ	—
Daily cleaning and straightening	✓		○		
9.00-11.00 Weekly, special, seasonal tasks and activities	✓				
Monday <i>Washing</i>	✓		○		
Tuesday <i>Ironing</i>	✓				
Wednesday <i>Work in flower garden</i>	✓				
Thursday <i>Clean downstairs windows</i>	✓		○		
Friday <i>Cleaning house</i>	✓		○		
<i>Baking, cleaning</i>	✓			Δ	
Saturday <i>Clean upstairs windows</i>	✓	x	○	Δ	—
Sunday <i>Attend church, rest</i>	✓		○		
11.00-11.15 Rest period	✓				
11.15-12.15 Prepare lunch	✓				
12.15-12.45 Serve lunch	✓				
12.45-1.30 Prepare dinner	✓				
Wash dishes and do kitchen work	✓		○		
1.30-2.30 Rest and dress	✓		○		
2.30-5.15 Weekly, special, seasonal tasks and activities	✓		○		
Monday <i>Mend, dampen clothes</i>	✓		○		
Tuesday <i>Sew</i>	✓				
Wednesday <i>Work on club report</i>	✓				
<i>Club meeting</i>	✓			Δ	
Thursday <i>Yard work</i>	✓		○		—
<i>Thuring</i>	✓				
Friday <i>Take daughter to dentist</i>	✓	x		Δ	—
<i>Yard work</i>	✓				
Saturday <i>Scout meeting</i>	✓	x	○	Δ	—
Sunday <i>Visit, rest, picnic</i>	✓				
5.15-6.00 Prepare dinner	✓				
6.00-6.45 Serve dinner	✓	x		Δ	—
6.45-7.15 Wash dishes and do kitchen work	✓		○	Δ	—
7.15 Reading, visiting, recreational activities, light work	✓	x		Δ	—
8.30 Bedtime, clothes laid out for next day				Δ	—
Put living room in order before retiring		x			

mothers several possibilities for solving the problem of child care.¹⁸

Control in Carrying Out Time Plans

Carrying time plans to successful completion follows the making of the plan. No matter whether a plan is a mental record or a written one, it must be workable to be of any value. It must

¹⁸ Charlotte Adams, *Housekeeping After Office Hours*, New York: Harper and Brothers, 1953, pp. 1-10.

work when things are running along in normal fashion; and with adjustment it should work when emergencies arise. A good plan will always serve as a guide no matter what happens.

The homemaker's skill in adjusting her time plans when interruptions arise helps control many situations. In cases of illness, or when outside work or shopping takes one away for part of a day, it may be necessary to omit all but the essential work from the day's plan. When this seems unwise, a little more speed, a shift in standards for the day, an extra hour's work in the evening, or help from the family may be the means of catching up. The best of managers cannot escape emergency days, but they can learn to meet them with mental poise.

Establishing good time practices and work patterns for the daily activities makes it easier to weave personal and leisure activities into the plans. It takes study to bring the various parts of a time and activity plan into a well-controlled, workable whole. The satisfactory control of one's time comes about gradually.

Evaluating Time Plans

Evaluation enters into both the making and the carrying out of plans, as well as in reviewing the results. In planning possible ways of reaching goals in time management, such as meeting the time and work demands of daily living, satisfying the desires for leisure activities and mental growth, and saving time from one task to use in doing another, one is constantly evaluating different lines of action in the search for the best one to follow.

As time and work plans are carried out, there is constant evaluation of performance and checking of accomplishments to be sure that things are going about as planned. If time runs short, or if adjustments must be made in the day's work, the evaluation of many factors enters into the decisions that must be made. Conscious or unconscious evaluation of one's use of time and accomplishments shapes and improves new plans. *Evaluation is a flexible mental tool in time management.*

As one reviews and analyzes a plan at the close of the day's work or at the end of the week, it is well to ask:

Was the plan workable?

Did it help in doing what had to be done?

Did it satisfy and meet the needs of the family?

If not, where did it fail?

Was the trouble with the plan? Was it in controlling the plan in action? Or was it failure to make satisfactory evaluations?

Any plan that makes possible the attainment of individual and family goals to a satisfying degree without wasting the resources available or causing unnecessary tensions may be considered successful.

Additional References

Gross, Irma H., and Elizabeth Walbert Crandall, *Management for Modern Families*, New York: Appleton-Century-Crofts, 1954.

Household Management and Kitchens, The President's Conference on Home Building and Home Ownership, Washington, D. C., 1932.

Johnstone, Margaret B., "Most Valuable Thing a Man Can Spend," *Reader's Digest*, August, 1957.

Kneeland, Hildegard, *Time Spent in Work by Farm Women*, U. S. Dept. Agr. Yearbook, 1928.

Krech, Hilda Sidney, *The Other Side of the Day*, New York: Alfred A. Knopf Company, 1958.

"More Spare Time—But for What?," *Changing Times* (August, 1958), pp. 7-9.

Thorpe, Alice Cutler, *Patterns of Family Interaction Within the Home*, Michigan State University.

Updegraff, Robert R., *All the Time You Need*, Englewood Cliffs, N. J.: Prentice-Hall, 1958.

Walker, Kathryn, E., *Homemaking Work Units for New York State Households*, Cornell University, Doctor's Thesis, film, 1955.

Wilson, Maud, *Use of Time by Oregon Farm Homemakers*, Ore. Agr. Exp. Sta. Bul. 259, 1929.

Wright, Mary and Russel, *Guide to Easier Living*, New York: Simon and Schuster, 1950.

7

Energy Management

THE MANAGEMENT OF ENERGY is more difficult and complex than time management. One can always count on 24 hours a day in making time and activity plans, but one never knows how much energy can be counted on to carry them out. The energy that each person has to use for work and other activities depends on his or her physical heritage and mental and physical health. All homemakers have high activity days and low activity days, times when they accomplish a lot, and other times when they have little to show for the 24 hours.

✓ Fatigue or tiredness, which lowers one's capacity for doing work, is closely related to the way a homemaker uses her energy and her mental approach to her homemaking responsibilities. By planning her activities so that the energy used will not be excessive and so there will be sufficient energy to enjoy and participate in other activities, a homemaker accomplishes two of the major goals of energy management.

Homemakers who wish to achieve these goals will need to understand: (1) the relation of energy to the stages in the family life cycle; (2) the energy costs of the various homemaking activities; (3) what activities are the most tiring; (4) the forms and effects of fatigue; (5) the use of rest periods to relieve physiological fatigue; and (6) the role of planning, controlling, and evaluating in energy management.

Energy Demands in Different Stages of the Family Life Cycle

Although there are no studies to show the actual demands upon the homemaker's energy during the different stages of the family life cycle, the time demands which were shown and discussed in the chapter on time management indicate the stages when the most work must be done.

During Stage 1 the energy demands are usually light, but if the homemaker works, she must learn to divide her energy between the demands of her outside work and her home. In Stage 2, when children are young and require more care, and when washing and ironing and food preparation take more time, energy demands increase rapidly. During Stages 3 and 4, when the children are in grade school and high school, much energy is needed to meet all the family demands, both inside and outside the home. This is the time of greatest activity for the children and the family. When children reach college age (Stage 5), the load may lighten at home, but this is the time many homemakers become interested in outside activities. Helping married children welcome new members to their families often brings additional responsibility. During Stage 6 energy diminishes and the main problem may be to conserve the supply. Physical handicaps such as heart ailments or polio often shape the energy-spending patterns of homemakers.

Energy Costs of Homemaking Activities

The time-spending chart on page 113 gives some idea of the amount of energy a homemaker's working day calls for. In the outline on page 131 are listed the different types of effort used in homemaking activities.

The performance of each homemaking task requires several types and combinations of effort. For instance, some *mental effort* is necessary to direct the doing of any task, even the routine ones such as dressing, sweeping, and dishwashing, which are

done almost automatically by most homemakers. Although one is seldom conscious of it, *visual effort* is required in most activities, since the eyes must direct the movements of the body. Muscular movements of the eyes and adjustment of the vision to different distances and lighting conditions are continually taking place. No small amount of *manual effort*—reaching, raising, lifting, holding, carrying, stretching, pulling, and pushing—is necessary. Such tasks as preparing meals, setting and clearing the table, dishwashing, and laundering require this type of effort. *Torsal effort*—bending, leaning, rising, turning, stooping, sitting, and kneeling—is necessary in doing some of the more strenuous tasks, such as those connected with the care of the house, the garden, and yard. *Pedal effort*—walking, moving, and standing—is an essential part of many homemaking and recreational activities.

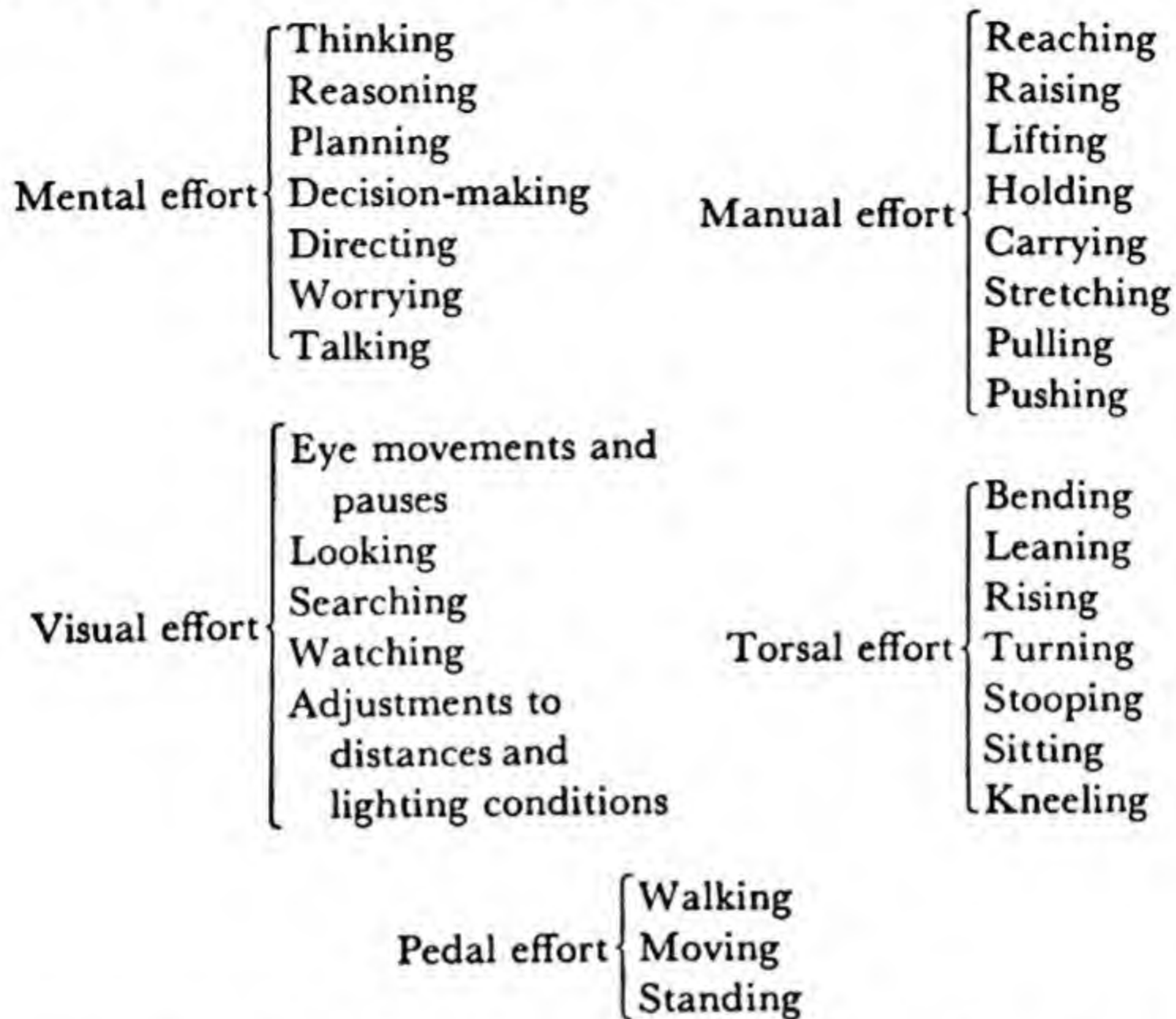
Thus, while the various homemaking activities require different combinations of effort, most tasks require mental, visual, manual, and torsal effort of some kind, and a large number also require pedal effort.

In order to work out well-balanced energy-spending patterns, homemakers need to know the energy costs of the various homemaking activities and also the ones that are considered most fatiguing.

The human energy required for the performance of any task is made up of several different parts. A certain amount of energy is needed for the maintenance of muscular tension and for the natural body processes such as respiration, circulation, secretion, and excretion. This is known as resting metabolism. In addition there is the energy used in moving about and in the actual doing of the task.

In the studies that have been made, the energy expended in sitting, standing, walking, or in doing a task is measured by determining how much oxygen is consumed per minute. The results are given in calories used per hour for each pound of body weight and in percent above resting. In each experiment the resting metabolism of the person being tested, as well as the energy expenditure in performing the task, is determined. The

DIFFERENT TYPES OF EFFORT USED IN HOMEMAKING ACTIVITIES *



* Suggestions from "On Correalism and Biotechnique," Frederick J. Kiesler, *Architectural Record* (September, 1939), p. 61.

TABLE 5. ENERGY EXPENDITURES PER HOUR UNDER DIFFERENT CONDITIONS OF MUSCULAR ACTIVITY *

Form of Activity	Calories per Hour for Each Pound of Weight	Percentage of Increase over Lying Still
Awake, lying still	0.50	
Sitting at rest	0.65	30
Standing relaxed	0.69	38
Walking, 2.6 miles an hour	1.30	160
Walking, 3.75 miles an hour	1.95	290
Walking downstairs	2.36	372
Walking upstairs	7.18	1,336

* Portion of table in *Essentials of Nutrition* by Henry C. Sherman and Caroline Sherman Lanford, New York: The Macmillan Company, 1940, p. 77.

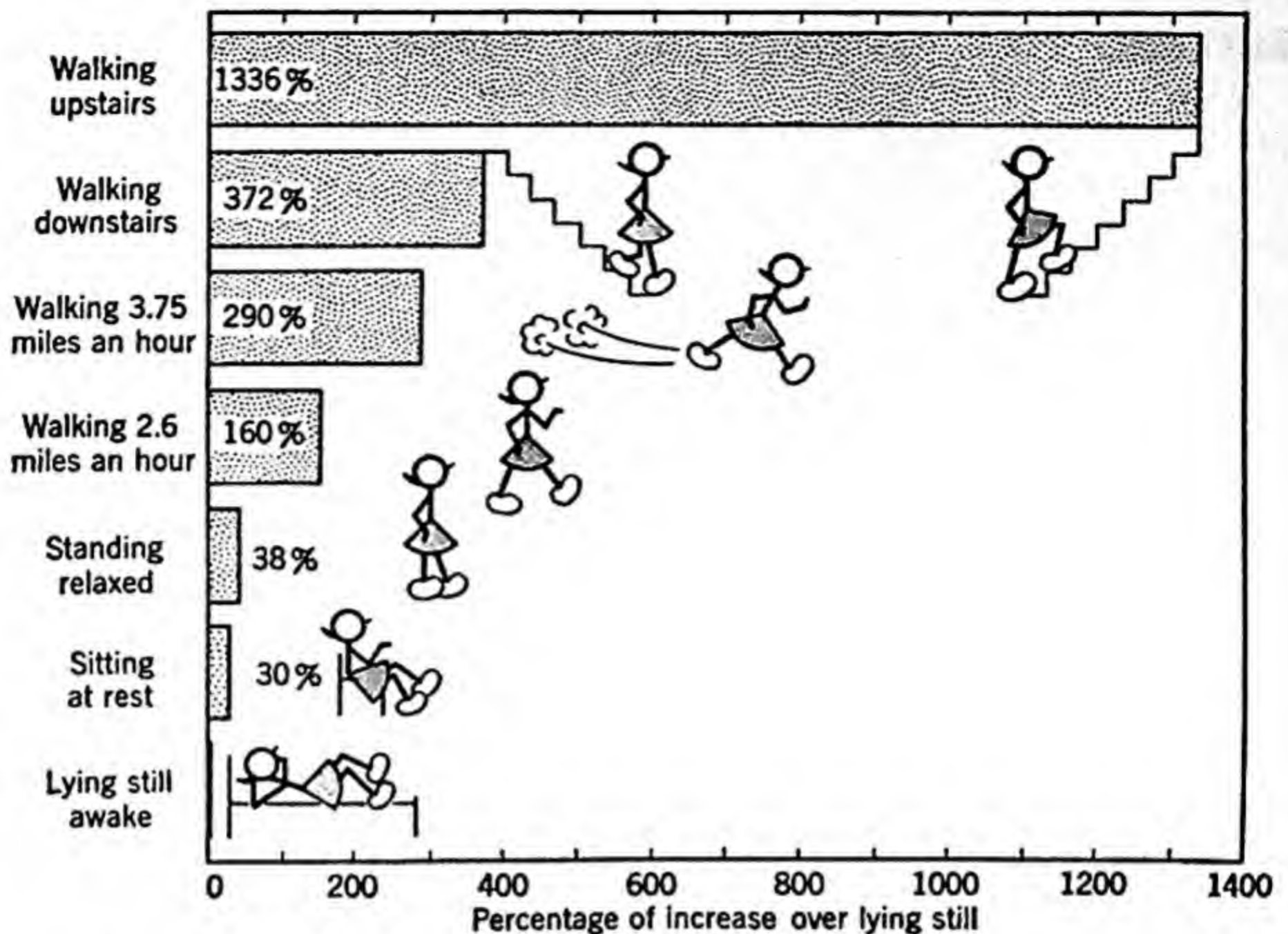


Figure 6. Where your energy goes. (Adapted from *Posture in Housework*, Ext. Service, U. S. Dept. Agr. Misc. Pub. 34 (Revised).)

difference between the total energy cost and the energy cost of resting gives the energy cost of the task itself.

The energy used in sitting, standing, and walking is shown by Sherman and Lanford in Table 5. The large amount of energy used in walking and in going up and downstairs indicates where much of the homemaker's energy goes. These figures are on the basis of calories per hour for each pound of weight. Figure 6, which shows where the homemaker's energy goes, is based on these findings. The energy expenditures in household tasks are shown in the following studies.

Benedict and Johnson, who made the first study in the field of homemaking, reported on the energy expended by 14 to 25 women who were tested in the performance of several household tasks. They found reading and hemming to be light work, increasing the metabolism from 3 to 22 percent above resting

in a chair. Dusting and sweeping were strenuous, causing a metabolism increase of about 150 percent.¹

Two other investigators, Langworthy and Barott, using two subjects, studied other household tasks, which they divided roughly into three classes: (1) light work, such as knitting, darning, sewing by hand and with a motor-driven machine, which causes an increase of about 15 percent above resting in a chair; (2) moderate work, such as ironing towels, dressing infant (doll), washing dishes, and sewing by foot-driven machine, which increases the metabolism about 24 calories per hour; (3) strenuous work, such as washing towels and sweeping the floor, which increases the energy expenditure about 50 calories per hour. Washing dishes at a table 25.6 inches high required more energy than washing at one 39.4 inches high. The least energy was used when the work was done at a table 33.5 inches high.^{2,3,4}

A study of the energy expenditure of eight subjects during breadmaking and when polishing the floor by hand was made by Gairns and O'Brien, who found that these tasks required moderate effort. The average cost was 33.53 calories per hour.⁵

A report of the human energy cost of women subjects in operating a certain vacuum cleaner at different speeds was made by Swartz in 1929. The results showed that the total energy cost increased with the increased speed and that, on the basis of efficient cleaning, a speed of $\frac{1}{2}$ or 1 foot a second was the most economical of human energy. The total cost of the $\frac{1}{2}$ -foot rate was

¹ F. G. Benedict and A. Johnson, "Energy Loss of Young Women During the Muscular Activity of Light Household Work," *Proceedings of the Philosophical Society*, Vol. 58 (1919), pp. 89-96.

² C. F. Langworthy and H. G. Barott, "Energy Expenditure in Household Tasks," *American Journal of Physiology*, Vol. 52 (1920), pp. 400-408.

³ C. F. Langworthy and H. G. Barott, "Energy Expenditure in Sewing," *American Journal of Physiology*, Vol. 59 (1922), pp. 376-380.

⁴ C. F. Langworthy, "Report of Work on Energy Expenditures for Sewing and Some Other Household Tasks," *Journal of Home Economics*, Vol. 14 (December, 1922), pp. 621-625.

⁵ S. Gairns and M. K. O'Brien, "Results of Experiments Determining Energy Expenditure During Some Household Tasks," *Journal of Industrial Hygiene*, Vol. 4 (1922), pp. 283-291.

55.5 calories, and of the 1-foot rate, 79.1 calories. When these speeds were used, the task could be considered light work.⁶

The average human energy cost of a number of homemaking tasks—paring potatoes, laundering, ironing linen napkins, and mixing batters and doughs—proved to be as follows in a study by Swartz. On the average, paring potatoes required about 50 percent more energy than resting. Sitting at work in a chair saved some energy, but sitting at work on a stool in an uncomfortable position required more energy. The energy cost of wringing clothes with the electric wringer was half as great as by hand or with a hand-power wringer. Ironing napkins required about 82 percent above resting. Sitting at work reduced this cost 20 percent. This study showed that hanging clothes from a basket on a utility table takes much less energy than that required for bending and lifting clothes from a basket on the floor or ground. Kneading dough required about 116 percent more energy than resting, and beating batters averaged about 53 percent above resting. (See Table 6.)

A classification of homemaking tasks according to their energy demands on the body was set up by Swartz as follows:

Tasks	Percent above Resting
Light	Under 100
Moderately heavy	100–150
Heavy	150–200
Very heavy	200–300
Extremely heavy	Above 300

According to this classification, paring potatoes, ironing napkins, and beating batter may be classed as light work. Kneading dough and doing most laundry tasks where modern equipment is used are moderately heavy work. Rinsing clothes, hanging them up from a basket on the floor, washing clothes by hand, and wringing with a hand-power wringer are the heavy tasks connected with laundry.

A study of some effects of the height of ironing boards on the

⁶ V. W. Swartz, "Human Energy Costs of Operating a Vacuum Cleaner at Different Speeds," *Journal of Home Economics*, Vol. 21 (June, 1929), p. 44.

TABLE 6. ENERGY COST OF HOUSEHOLD TASKS AS COMPARED WITH RESTING *

Activity	Average Percent Above Resting
Paring potatoes	
Standing	50.2
Sitting in a chair	42.8
Sitting on a stool	54.1
Laundry work	
Wringing clothes	
By hand	191.0
With hand-power wringer	197.0
With electric wringer	99.0
Putting up and removing line	135.0
Hanging clothes	
From a basket on the floor	184.0
From a utility table	118.0
Ironing	
Standing at normal board	82.2
Sitting in chair	62.0
Sitting on stool	64.0
Food preparation	
Kneading dough at a low table	113.0
Kneading dough at a medium table	119.0
Beating batter at a low table	54.8
Beating batter at a medium height table	52.0

* Adapted from V. W. Swartz, *The Human Energy Cost of Certain Household Tasks*, Wash. Agr. Exp. Sta. Bul. 282, 1933.

worker was reported by Knowles in 1946. She found that the height of the surfaces at which women worked had a noticeable effect upon the caloric requirements while ironing. The task of ironing at either a 31-inch or 34-inch board was considered light or moderate work.⁷ (See page 138.)

A study to determine the energy expenditures of motions used in many household activities was made by Bratton in 1951. Reaching, bending, stooping, and twisting are component parts of such activities as preparing food, washing dishes, storing uten-

⁷ Elaine E. Knowles, *Some Effects of the Height of Ironing Surface on the Worker*, Cornell Univ. Agr. Exp. Sta. Bul. 833, 1946, p. 54.

sils and supplies, making beds, cleaning, and laundering. The amount of oxygen consumed was used as a measure of energy expenditure rather than calories. The former is directly proportional to the latter. The motion studies included reaching with the arms to three heights from the floor, 46 inches, 56 inches, and 72 inches; reaching by means of trunk bend to two heights above the floor, 22 inches and 3 inches; reaching by means of knee bend to 3 inches above the floor; a step up of 7 inches above the floor; and a body pivot with arms extended to a height of 36 inches above the floor. The results of this study are given in Figure 7. Bratton found that reaching up with the arms requires less energy than bending the body; and that the energy consumed would be in proportion to height of reach. Reaching by means of trunk bend to 3 inches above the floor required less energy than reaching by means of knee bend. However, the latter is favored by specialists in body mechanics because it involves less body strain. Information of this type is of value in planning storage space in work centers in the kitchen and in other parts of the house.

A more recent study was reported by Bratton on the relative effects on the worker of standing to work, or sitting to work under the different postural conditions.⁸

The different work conditions were compared by the measurement of oxygen consumption, the measurement of the degree of lift of the arm, and by a measure of the rate of work. The oxygen consumption data were converted to energy cost in calories per minute.

The average energy cost for standing to work was 1.45 calories per minute. The average energy cost for sitting to work on a stool of medium height with the knees under the 36-inch counter and the feet on the step of the stool was 1.42 calories per minute. The average cost of sitting to work at a 36-inch counter on a stool of medium height was 1.53 calories per minute when the cabinet front prevented positioning the knees under the

⁸ Esther Crew Bratton, "Some Factors of Cost to the Body in Standing or Sitting to Work Under Different Postural Conditions," *Journal of Home Economics* (November, 1958), pp. 711-715.

counter. The average arm lift for sitting at the 36-inch counter on the stool of medium height was approximately double that for standing to work. The arm lift was greatest for sitting at the 36-inch counter with the knees forced to one side. Standing to work, therefore, is a more favorable position for arm motions. The average rate of work was slightly higher for standing than for the other working positions. These figures show that the assumption that sitting to work will save energy is apparently not true. Swartz also found that sitting on a high stool in paring potatoes required a greater output of energy than standing. (See page 135.)

In a recent German study such tasks as washing dishes, clearing

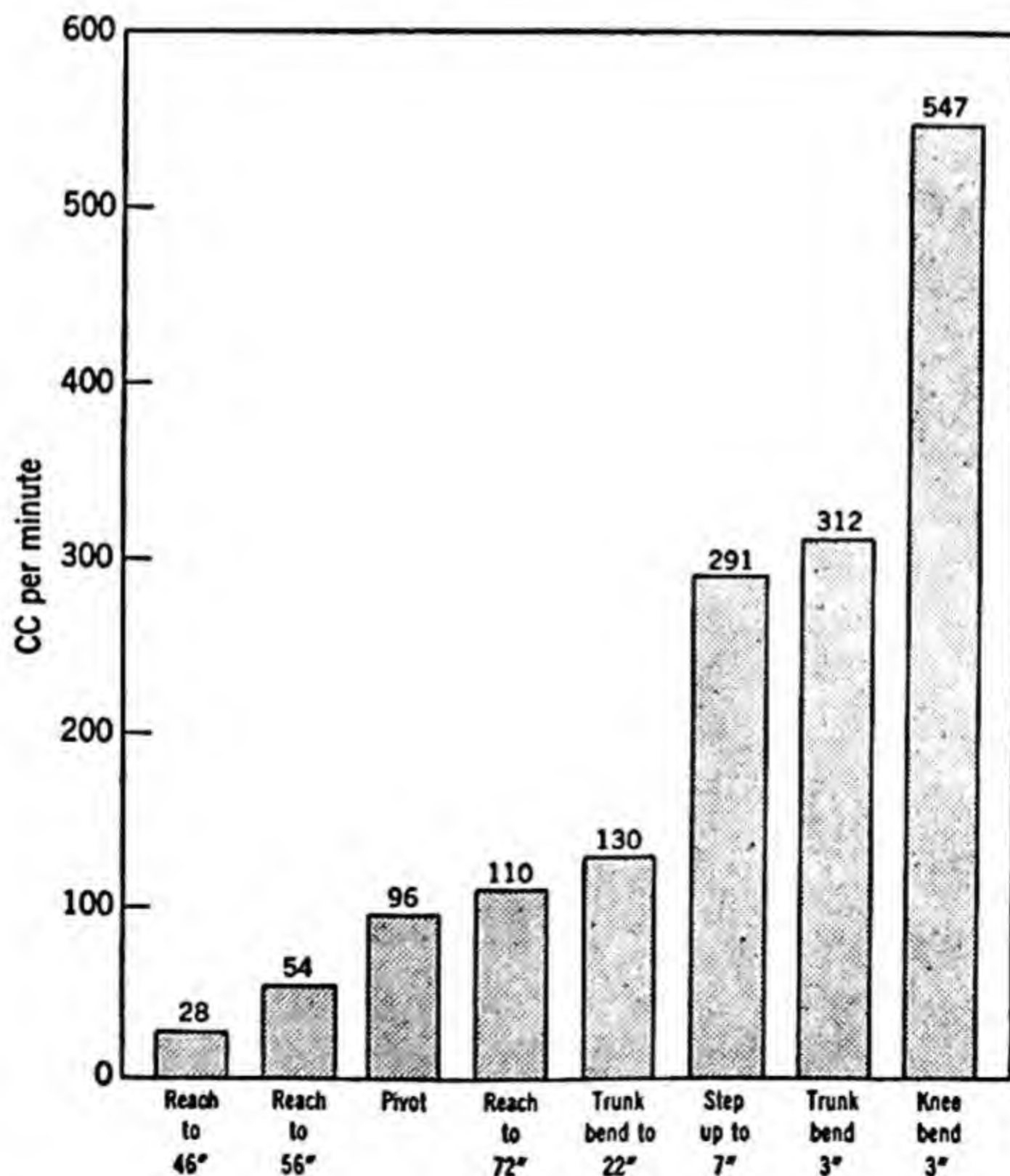


Figure 7. Oxygen consumed, increase over standing, for various activities. (Esther C. Bratton, *Oxygen Consumed in Household Tasks*, Cornell Univ. Agr. Exp. Sta. Bul. 873, August, 1951, p. 12.)

HOMEMAKING ACTIVITIES CLASSIFIED ACCORDING TO THEIR ENERGY DEMANDS ON THE BODY

Light Work Under 100 percent above resting	Moderately Heavy Work 100–150 percent above resting	Heavy Work 150–200 percent above resting
Hemming	Dusting	Scrubbing floor
Knitting	Using carpet sweeper	Washing clothes by hand
Crocheting	Using some vacuum cleaners	Rinsing clothes
Darning	Polishing furniture	Wringing clothes with hand-power wringer
Hand sewing	Washing dishes	Hanging clothes from basket on floor
Sewing on motor- driven machine	Kneading dough	Washing windows
Paring potatoes	Breadmaking	Waxing floor
Ironing napkins	Sewing by foot-driven machine	
Beating batter	Wringing clothes by hand	
Washing dishes	Wringing clothes with elec- tric wringer	
Clearing away after meals	Drying clothes in an extractor	
Sweeping kitchen floor	Putting up and removing clothesline	
	Hanging clothes from utility table	
	Emptying washing machine	
	Cleaning laundry equipment	
	Ironing	

up after meals, sweeping the kitchen floor, and sewing on a machine were listed as light work; polishing furniture was considered moderately heavy work; whereas washing windows, waxing floors, and scrubbing were classified as heavy work.⁹

In the preceding outline, the household activities mentioned in the various studies reported have been classified according to their energy demands on the body. The list covers a wide range of activities and includes many of the tasks most frequently done in the home. It answers the question: What tasks require the greatest expenditure of energy? By relating to this outline the information contained in the outline on page 131, showing

⁹ Mary Skattebal and Kathleen A. Johnston, *Energy Used in Household Activities*, Washington Tuberculosis Association, 1000 Leorna St., Seattle, Wash.

the different types of effort used in homemaking activities, we see that the tasks which are considered moderately heavy or heavy require both standing and walking as well as different forms of manual and torsal effort. Other homemaking activities not given in these lists may be roughly classified by comparing the effort required to perform them with those that have been studied. ✓ Fatigue is another factor that must be taken into consideration in energy management. Measurement of the actual expenditure of energy in doing household tasks gives little indication of the fatigue experienced by the worker. Different kinds of work have different fatiguing effects. Each person makes a different response to work, and fatigue patterns vary in many ways. Some of the light tasks which involve little expenditure of energy may be very fatiguing owing to mental approach, postural strain, muscle tension, or the concentration and skill required, whereas some of the heavier tasks which require more energy may actually be far less fatiguing. ✓

Most Fatiguing Tasks

Tasks which one enjoys doing are usually less fatiguing than those which one dislikes. The tasks considered most fatiguing by homemakers have been recorded in a number of studies. Cleaning and care of the house, and washing and ironing were indicated as the most fatiguing and most disliked by many of them.

Perkins, Beyer, and Bane found that laundry was considered tiring because of the many movements required to do the work.¹⁰ Standing, walking, lifting, carrying, stretching, and stooping were considered most fatiguing of all the movements. Carrying and stooping were complained of by most. Of the 411 Illinois homemakers included in this study, 339 indicated that they liked to wash, and only 66 disliked the job. The data show that the women who liked to wash have the most conveniences and seemed to get considerable satisfaction from the work. The women who

¹⁰ Nellie L. Perkins, Wilma Beyer, and Lita Bane, *A Survey of Some Fatigue Problems of Rural Homemakers*, Ill. Agr. Exp. Sta. Bul. 514, 1945, pp. 12-48.

disliked washing lacked modern conveniences, thought it hard work and a "messy" job.

In her study of fatigue experienced in ironing, Knowles found that the women who ironed at the standard 31-inch board height described their feelings as "tired" or "very weary" following the three-hour ironing period, and further located pains, aches, or strains of the back, feet, legs, and the like (see page 165). After ironing at a board of preferred height, they described their feelings as "somewhat" or "rather" tired or weary, but there were definite complaints only twice. It appears from these findings that posture habits of the worker as well as height of working surfaces may be the cause of fatigue.¹¹

Van Bortel and Gross reported in their study of two socioeconomic groups that large numbers of homemakers of both groups expressed negative attitudes toward some homemaking activities.¹² There seemed to be a tendency to associate fatigue with disliked tasks, and lack of fatigue with enjoyable tasks. The reasons given by the lower group for considering an activity non-fatiguing were enjoyment and new experience. The upper group mentioned variety, that they could sit down, that work was easy to do, and that they had good equipment. House care was the task most disliked by both groups of homemakers.

Since lack of efficient equipment and dislike of the task are given as the main causes of fatigue in connection with these activities, it is apparent that fatigue costs can be reduced by providing work-saving equipment and by finding ways of making the tasks more enjoyable and the surroundings more attractive. Some of the methods of doing this will be discussed later.

Forms and Effects of Fatigue

An understanding of the different forms of fatigue and their influence on mental and physical efficiency is essential in handling problems connected with energy management. The re-

¹¹ Knowles, *op. cit.*, pp. 8-9, 54.

¹² Dorothy Greey Van Bortel and Irma H. Gross, *A Comparison of Home Management in Two Socio-Economic Groups*, Mich. State College Agr. Exp. Sta. Technical Bul. 240, April 1954, pp. 38-39.

search in recent years in the fields of physiology, psychology, industrial management, and home economics has greatly increased the information on fatigue. While the earlier studies placed their emphasis on physiological fatigue, the more recent ones have explored some of the causes and results of psychological fatigue.

Fatigue is not easy to define. It manifests itself in different yet closely related forms. One may experience:

✓ A physiological state of fatigue which reduces the ability to do work because of previous work.

A psychological state of fatigue which results in an aversion to to some kinds of work and in a reduced output of work.

Physiological Fatigue

According to various authorities fatigue may arise in the muscular system, in the nervous system, or in both combined. During muscular activity the body consumes fuel and gives out energy. The energy-producing material in the muscle is mainly glycogen, which is formed by the muscle tissue from the sugar products brought to it by the blood. In muscular work glycogen unites with the oxygen in the blood stream, freeing energy and forming lactic acid and carbon dioxide, both waste products which interfere with continued muscular activity.

After any kind of work, recovery, or the removal of lactic acid and carbon dioxide in the muscles, is necessary. During the process the carbon dioxide is picked up by the blood stream and carried to the lungs, where it is exhaled. At the same time, the blood brings oxygen to the muscles, and the lactic acid is removed by oxidization and reconversion to glycogen. Thus oxygen helps to prevent fatigue by aiding in the removal of lactic acid in the muscles.

During moderate muscular work a person is usually able to take in enough oxygen to keep the level of the lactic acid down to the point where muscular work can be continued with little fatigue for some time. If work is very strenuous, however, oxygen cannot be supplied fast enough to reconvert all the lactic acid formed during the work, and recovery cannot keep up with the work done. When this happens, fatigue, or diminished capacity

for work, is produced and time must be allowed for recuperation.

Although the fibers of a muscle possess the power of contraction, every voluntary muscular contraction is due to the stimulus received from the central nervous system through the nerves. From the brain, nerve impulses pass down the nerves to the spinal cord. Nerves to the muscles in the arms, legs, and trunk branch off from the spinal cord at different levels and carry the impulses to the muscles themselves. Thus, in every voluntary muscular movement, nerve cells, nerve fibers, muscles, and the junction points between these structures work together. If any one of these structures fails to function normally, it is difficult for messages from the brain to reach the muscle and direct its movements.¹³

Any disturbance of the nervous system interrupts the normal smooth coordination of muscular work. The loss of control over the direction of the nerve impulse is one of the first symptoms of mental fatigue.¹⁴

The way in which fatigue affects one's working capacity was first shown by Mosso,* who designed a finger ergograph to record the contractions of the muscles which flex the fingers. With this instrument he was able to obtain fatigue or work curves for the finger muscles when pulling against different weights. Figure 8 shows such a fatigue curve. Each line or stroke in the tracing represents a contraction of the finger. It will be seen that, as the exercise continues and the muscles tire, the length of the contraction gradually decreases until a point is reached where fatigue is so great that the weight can no longer be lifted. If the highest points of contraction are joined, the fatigue curve which is characteristic of the person tested shows more clearly.¹⁵

In comparing the fatigue curves of different subjects, Mosso found that each one showed characteristic differences in his capacity for continued work. Some individuals used up their

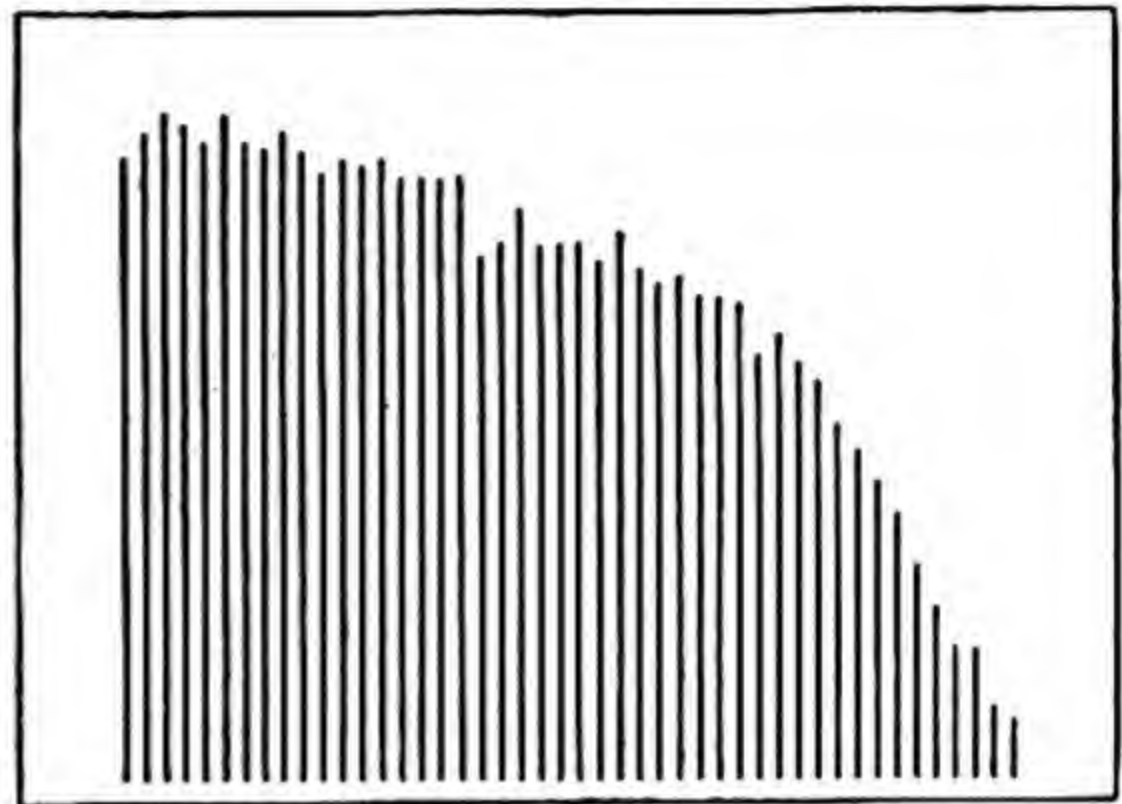
¹³ G. P. Crowden, *Muscular Work, Fatigue and Recovery*, London: Sir Isaac Pitman and Sons, 1932, pp. 2-3.

¹⁴ E. C. Schneider, *Physiology of Muscular Activity*, Philadelphia: W. B. Saunders Company, Revised Edition, 1939, pp. 32-33.

¹⁵ A. P. Mosso, *Fatigue*, New York: G. P. Putnam's Sons, 1906, pp. 88-92.

* The studies made by Mosso on fatigue analysis are of historical significance, as he was the first to present the idea of the work curve which is so widely used today.

Figure 8. Work or fatigue curve for finger muscles when pulling a weight. (Adapted from A. P. Mosso, *Fatigue*, New York: G. P. Putnam's Sons, 1906, p. 89.)



How are you?

energy gradually before fatigue set in. Others became fatigued soon after work was started. Through repeated experiments with the finger ergograph, Mosso further showed that the work curves of different individuals, or the manner in which they fatigue, remained fairly constant. Yochelson, in an unpublished study, also reports that the type of curve of each subject conformed to unique individual patterns, regardless of the part of the body employed. These experiments include curves obtained by means of leg, finger, hand, and arm ergographs.¹⁶

Other experiments by Mosso indicate that the effects of fatigue are more difficult to overcome as fatigue increases, and when the muscles are exhausted, a very long interval is needed to make a complete recovery. Thus, the worker who continues to work when he is already fatigued not only produces less but he also does greater injury to his body.¹⁷

According to production studies made in industry, fatigue lowers an individual's working capacity in an industrial plant in much the same way as it interferes with the capacity of muscles tested with the ergograph. Decrease in capacity for work through fatigue, however, seldom reaches the point of exhaustion in any kind of work, because no worker uses the same muscles through the working period, and no worker exerts himself on the job as a subject will in a short experiment in the laboratory. Further-

¹⁶ M. S. Viteles, *Industrial Psychology*, New York: W. W. Norton and Company, 1932, p. 26.

¹⁷ Mosso, *op. cit.*, pp. 150-157.

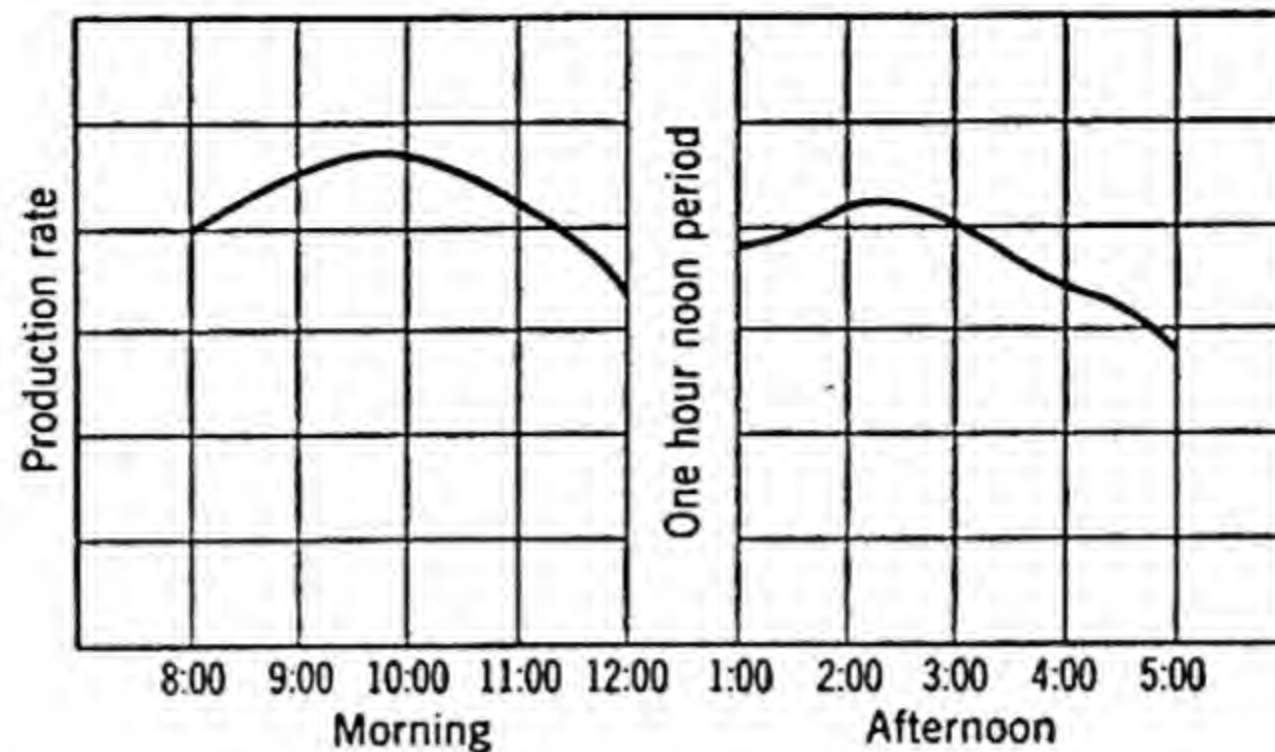


Figure 9. Typical daily production curve for an individual engaged in very heavy muscular work. (Ralph M. Barnes, *Motion and Time Study*, New York: John Wiley and Sons, Fourth Edition, 1958, p. 202.)

more, workers have learned to ward off fatigue by changing their positions and by taking occasional rest periods.^{18,19}

The amount of work done during the day may be shown by a work or production curve. For very heavy muscular work the curve might take the shape shown in Figure 9. The upward rise of the curve indicates a warming-up period in the morning. In most work it takes a short time for the worker to get into the swing of the thing and to become absorbed in the task. The curve, however, soon reaches its maximum and may run along on an approximate level for a short time. As the effect of fatigue makes itself felt, the rate of output gradually decreases and the curve begins to go down.

After lunch and rest the worker returns to work at a somewhat higher level than when he left off before lunch. There may be another warming-up period, which is followed by a gradual decrease in output, probably due to increasing fatigue. The curve for the afternoon is similar in shape to that for the morning except that it drops more rapidly toward the end of the day.²⁰

¹⁸ H. E. Burtt, *Psychology and Industrial Efficiency*, New York: D. Appleton and Company, 1929, p. 154.

¹⁹ Crowden, *op. cit.*, pp. 6-8.

²⁰ Ralph M. Barnes, *Motion and Time Study*, New York: John Wiley and Sons, Fourth Edition, 1958, p. 202.

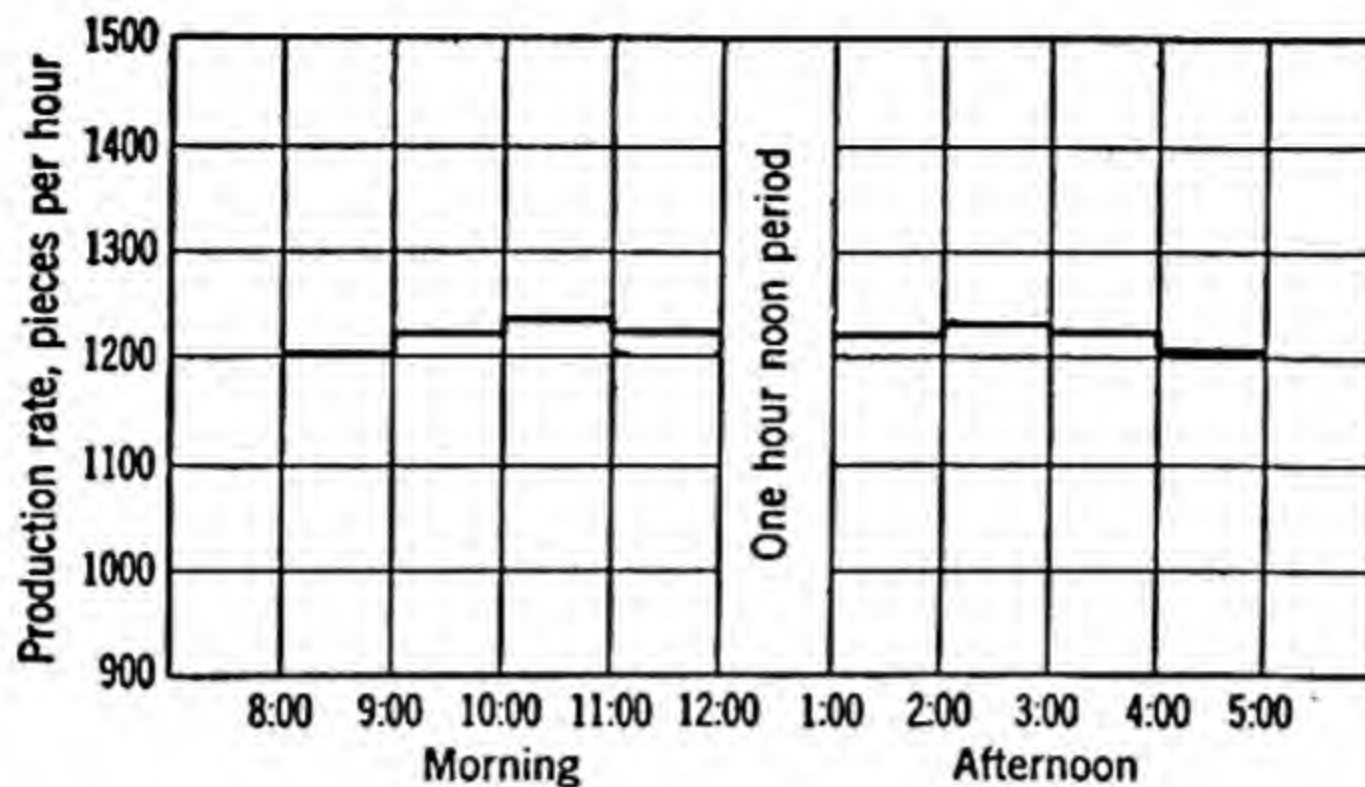


Figure 10. Typical daily production curve for an individual doing light work. (Adapted from Ralph M. Barnes, *Motion and Time Study*, New York: John Wiley and Sons, Fourth Edition, 1958, p. 203.)

Much of the work in industry today is light, requiring skill and dexterity rather than heavy physical effort on the part of the worker. Figure 10 is typical for this kind of work. This curve indicates that the output is fairly uniform throughout the day.²¹

The fatigue or work curves of the muscles as well as the daily work or production curves for both heavy and light work in industry show that three general stages are experienced in most work:

1. Worker's power gradually increases and the output of work slowly rises.
2. Worker's power reaches high point and the output of work remains on this level.
3. Worker's power gradually decreases and the output falls off.

While in industry there are two work curves during the day, one for morning and one for afternoon, in homemaking, where work is varied and more or less continuous throughout the day, the daily work curve may be expressed by means of a single curve. Although there is no way of obtaining a typical daily work curve or pattern of the homemaker's work, the work curves of industrial workers suggest a "probable" curve, since the homemaker experiences comparable stages in her work day.

²¹ *Ibid.*, pp. 202-203.

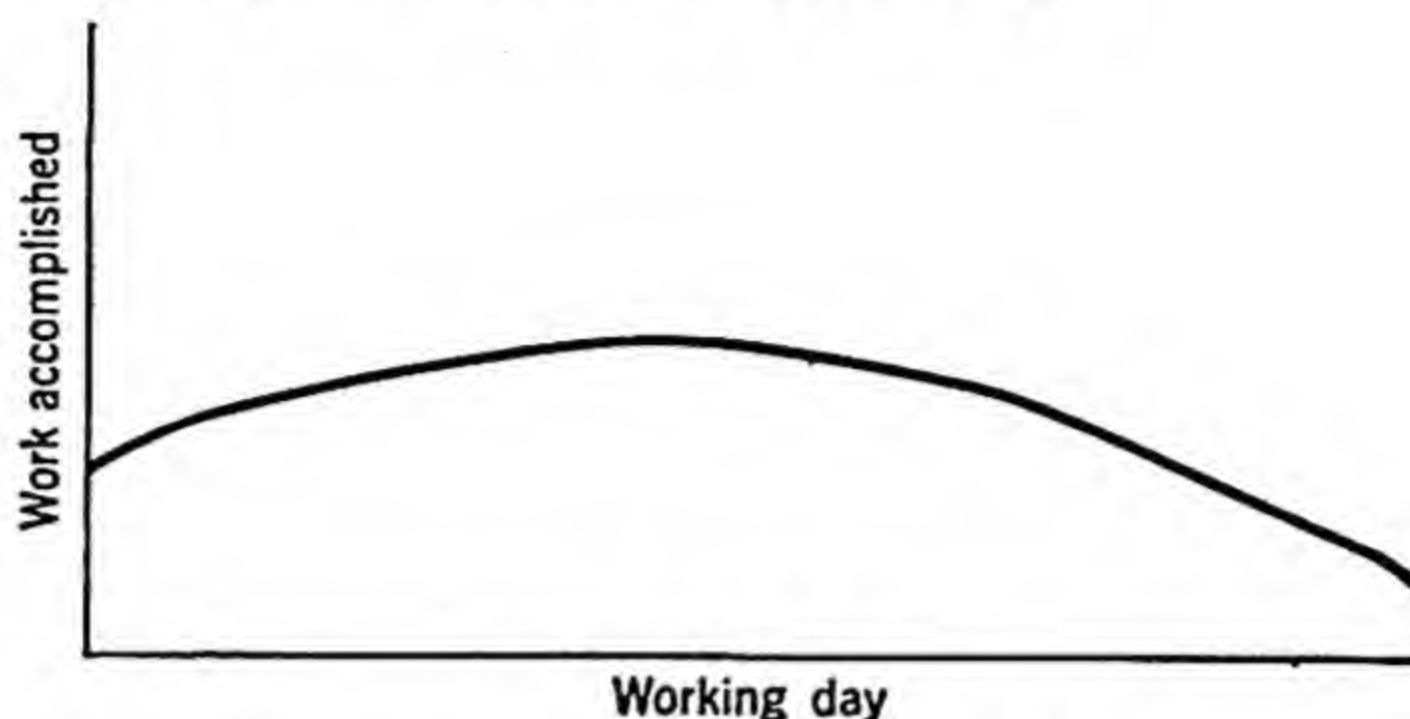


Figure 11. "Probable" daily work curve of the homemaker.

A probable daily work curve for the homemaker is presented in Figure 11. This curve has the characteristic shape of the daily work curves for the individuals doing heavy and light work in industry. There is the rise to maximum working capacity during the early hours of the morning followed by a gradual decline as fatigue increases. Such factors as illness, a poor night's sleep, nervous tension, an unusually heavy day's work, or overfatigue may cause variations in the shape of the curve from time to time. Each homemaker, however, has her own individual work pattern, which remains fairly constant from day to day. The homemaker who knows her own daily habits and feelings or the manner in which she tires can learn to make plans for the best use of her energy as well as the energy of those who help with the day's work.

Psychological Fatigue

Much of the fatigue experienced in the day-to-day activities of living is of a psychological nature. According to Bartley, "Fatigue or tiredness is but one of the many reactions of a person as a whole to a situation as he consciously or unconsciously interprets and evaluates it. Fatigue is simply one form of inadequacy to meet the demands the person recognizes."²² It is expressed in both bodily feelings and aversion to work. Even though the indications of such fatigue are often vague and indefinite, their importance cannot be overlooked.

²² S. Howard Bartley, "Fatigue, Aspirations and Conflicting Demands," *The Kitchen Reporter*, published by Kelvinator Kitchen, February, 1955.

Boredom fatigue has been recognized in industry for a number of years. A low level of motivation, a dislike for work, and a desire to stop work accompany boredom. Boredom may arise from the nature of the job, with the result that the same individual could be bored with one task and not bored with another. There appears to be considerable individual variation in susceptibility to boredom. A questionnaire containing items dealing with personal habits, attitudes toward work, home environment, and the like was checked by Ryan with workers engaged in sewing operations. It was found that monotony susceptibility on the job is related to dislike of regular habits outside of working hours. Those who adjusted well to the work tended to prefer a regular routine of household work and outside activities. The monotony-susceptible worker tended to be more poorly adjusted to her relationships with her family and the home.²³

The studies reported earlier showed that the homemakers who disliked the routine tasks in homemaking often found them monotonous and boring.

Frustration fatigue may be the result of a number of things. Much of a person's activity consists of following learned methods or habits. Habits not only are ways of acting, but also ways of thinking, feeling, and reacting to the various situations and demands that arise. When plans fail to work out and goals cannot be reached, or when conflict situations arise which call for the weighing of alternatives, the making of decisions, and the seeking of new goals, a person may experience feelings of frustration and increased tensions. Fatigue which results from such conflicts is a part of the total picture of frustration.²⁴

Knowles found some evidence of frustration fatigue in her discussions with homemakers regarding their attitudes toward certain tasks. Some of the reasons given for disliking tasks were: uncertainty and confusion in performance; conflicting standards within the family group and inability to satisfy all members; lack of appreciation on the part of other members of the family; unfavorable working conditions; practices and standards of work

²³ Thomas A. Ryan and Patricia Cain Smith, *Principles of Industrial Psychology*, New York: The Ronald Press, 1954, pp. 417-420.

²⁴ S. Howard Bartley and Eloise Chute, *Fatigue and Impairment in Man*, New York: McGraw-Hill Book Company, 1947, pp. 365-380.

conditioned by tradition and in conflict with new developments and methods; and time required by the task was preferred for other more interesting activities.²⁵

A study of the fatigue of homemakers with young children by Wiegand and Gross shows possible links between the homemakers' fatigue and their behavior and feelings.²⁶

The homemakers interviewed were questioned about certain attitudes toward homemaking and housing. Records kept by the homemakers for three consecutive days reported the activities and information pertinent to the most tiring period of each day.

For the homemakers as a group, their 1- or 2-hour intervals of greatest fatigue on weekdays centered around several peak periods of the day: the highest between 4:30 and 5 P.M. and the next from 5:30 to 6 P.M.

When the weekends (Saturdays and Sundays) were considered separately, the peaks of tiredness shifted. The highest peak on the weekends appeared from 12:30 to 1 P.M.; the second highest peak occurred in the evening between 7:30 and 8 P.M. During this most tiring period, the number of activities performed by the homemakers averaged 3.6, with a variation of one to nine. Thirty percent of the homemakers reported five to nine activities.

An analysis of the homemakers according to the degree of fatigue which they experienced and indicated after each of their most tiring periods showed certain differences between those who reported much fatigue and those who felt little fatigue.

The very tired woman was likely to be one who:

- had a child under 2 years of age.
- performed four to nine activities while she felt most tired.
- perhaps had difficulty in getting to sleep at night.
- felt disturbed when her homemaking tasks were unfinished.
- received less help and more hindrance while engaged in her activities during the most tiring part of the day.
- had not completed all of the activities which she had expected to do during her period of greatest fatigue.
- had somewhat less adequate and convenient housing arrangements related to care of children.

²⁵ Knowles, *op. cit.*, pp. 8, 9.

²⁶ Elizabeth Wiegand and Irma H. Gross, *Fatigue of Homemakers with Young Children*, Mich. Agr. Exp. Sta. Tech. Bul. 265, 1958, pp. 3-4.

The woman who had little fatigue was likely to be one who:

- did not have a child under 2 years of age.
- had no difficulty in getting to sleep.
- was undisturbed by unfinished homemaking tasks.
- was more apt to prefer the care of children than the very tired woman.
- accomplished more of the activities which she expected to perform during her most tiring period.
- received more help and less hindrance with her activities.
- had somewhat more adequate and convenient housing arrangements related to care of children.

Bartley points out that our present way of living has brought many conflicting demands. The homemaker lives a multiple life. In addition to her homemaking responsibilities she participates in a great many activities outside the home. For many homemakers these activities are considered to be as much a matter of routine duty as those inside the home. Many of these responsibilities involve worry and reaching for goals both for the organization and the individual concerned. The goals are often difficult to attain and the processes of attaining them fatiguing. This is a part of the daily fatigue pattern that is often overlooked.

The important thing, according to Bartley, is getting people to recognize "that fatigue really develops out of certain kinds of relationships between the individual and his or her surroundings, and not to believe that there must be a metabolic basis for it."²⁷ Very often fatigue develops long before the energistic resources of an individual are consumed. Once this is understood, much can be done to control the conflicts and frustrations that lead to the fatigue end result.

Frustration fatigue may also be the result of interruptions and unexpected demands which disturb one's work pattern. Constant adjustment of time and activity plans tends to lower both the quantity and quality of one's work.

²⁷ S. Howard Bartley, "Fatigue, Aspirations and Conflicting Demands," *The Kitchen Reporter*, published by Kelvinator Kitchen, February, 1955.

Role of Motivation

Studies that have been made in industry show that level of motivation has a relation to all forms of fatigue. When an individual dislikes a task, or when motivation is at a low level, fatigue becomes apparent very soon; but when motivation is high, fatigue may not be apparent until considerable exhaustion is shown. According to Maier, the motivating conditions in the work situation help to determine the amount of energy one has to spend for a task. High motivation appears to make more energy available for the task to be done, while low motivation releases less energy. We may conclude that motivation thus plays an important role in fatigue costs of homemaking activities.²⁸

All work is easier and more interesting if goals are involved. Planning immediate goals which are easily reached makes work less monotonous and steps up motivation. It helps to break a big job down into several smaller parts. The feeling of satisfaction in completing each small part helps one reach the final goal. Interruptions often interfere with the completion of tasks, disorganizing the day's work and causing much fatigue. Unfinished tasks leave a feeling of frustration or inadequacy in the mind of the worker. It is easy to forget the finished task, but hard to forget those that are left unfinished. Allowing free time in the daily work plan is one way of meeting this situation. It may be that the homemaker who straightens the living room before retiring does this because of the satisfaction it gives her in finishing the day's work and in being ready to meet the next day.

Some kinds of fatigue come and go. Fatigue that vanishes with a little excitement, an invitation to a movie or a picnic, a change in routine activities, or a new interest may be the result of boredom or minor tensions.

Rest Periods to Relieve Physiological Fatigue

Rest periods during the day's work help prevent excessive fatigue and inefficiency. The best length for rest periods and

²⁸ Norman F. Maier, *Psychology in Industry*, Boston: Houghton Mifflin Company, 1955, pp. 458-460.

the number needed will depend upon the nature of the work and upon the individual's energy pattern.

Experimental Investigations

A study by Manzer gives valuable data on the curve of recovery from muscular fatigue in terms of increase in output with different length rest pauses. Separate curves were plotted for five different muscle groups: the finger, the hand, the arm, the leg, and trunk. After the subject flexed these muscles until they were exhausted, he was allowed to rest either 5, 10, or 20 minutes and then was tested to determine the degree of recuperation that had occurred in that time. The average recovery after a 5 minute rest pause was 82 percent; after a 10 minute pause it was 90 percent; and after 20 minutes 95 percent.

This shows that at least three-fourths of the energy lost in work had been regained during the first 5 minute rest pause. The longer rest pauses yielded diminishing returns in recuperative value. Manzer also found that the small muscles of the finger and hand recovered more rapidly than the large muscles of the leg and trunk.²⁹

The effect of rest pauses on the production of women packing hand telephone sets was studied by Anderson. He found that the output was considerably increased after a 15 minute rest pause at the end of 2 hours' work. In the afternoon the output dropped slightly after 10 minutes were taken out for rest.³⁰

In industry rest periods are usually placed in the middle of the morning and the middle of the afternoon, and usually range in length from 5 to 15 minutes.^{31,32} They are most effective when introduced at the point in the work curve where the decrease in work begins to occur. How the rest period should be spent depends on the work being done. Unless the task is very

²⁹ C. W. Manzer, "An Experimental Investigation of Rest Pauses," *Archives of Psychology* (1927), Vol. 14, No. 90, pp. 1-84.

³⁰ A. G. Anderson, *Industrial Engineering and Factory Management*, New York: Ronald Press Company, 1928, p. 294.

³¹ Harold F. Burt, *Applied Psychology*, Englewood Cliffs, N. J.: Prentice-Hall, Second Edition, 1957, p. 438.

³² G. H. Miles and O. Skilbeck, "An Experiment on Change of Work," *Occupational Psychology*, London, Vol. 18 (1944), pp. 192-195.

strenuous, complete physical relaxation is not always best for the worker.

Barnes³³ points out that rest periods are desirable in many kinds of work both heavy and light. The reasons given are: "(1) rest periods increase the amount of work done in a day, (2) workers like the rest periods, (3) rest periods decrease the variability in the rate of working and tend to encourage the operator to maintain a level of performance nearer his maximum output, (4) rest periods reduce physical fatigue, and (5) they reduce the amount of personal time taken during working hours."

Rest Periods in Homemaking

Since the homemaker does a variety of tasks in a single day and keeps no accurate record of her output, it is hard to know her rest needs during a day's work.

The length and distribution of rest periods needed are determined by the fatigability of the homemaker and the type of work being done. For some workers a number of short rest periods may seem best; others may get sufficient rest and relaxation by a change of work.

Naturally the effect of fatigue upon individuals varies. No two workers experience the same amount of weariness or need the same amount of time for recovery. Many homemakers have found that introducing short rest periods at those times of day when fatigue is greatest permits them to recover from a certain amount of fatigue as the day goes forward. The length of the rest period, of course, depends on how fatigued the homemaker is, but in any event it should be long enough for her to feel rested and able to return to work with zest.

Planning Energy Use

The discussion of time management showed that time and energy planning are inseparable. Managing energy is similar to managing time. It involves the making of activity plans as well as carrying them out, and evaluating the results. In time planning, the clock on the wall or the watch helps measure time

³³ Barnes, *op. cit.*, p. 204.

expenditures, while in energy planning knowledge of the energy costs of different activities, one's skill and ability to turn out work, and the effects of fatigue help measure energy expenditures. Through experience one learns how to work out well-balanced, energy-spending patterns that are based on the store of energy available from day to day.

Control in Carrying Out Activity Plans

Motivation plays an important role in carrying out all activity plans, including those having to do with energy management. We have seen that high motivation makes more energy available for the tasks at hand, and helps control fatigue costs resulting from work. Motivation can be increased by developing more favorable attitudes toward homemaking, by making work and work situations more attractive, and by stimulating greater interest and goal consciousness on the part of the family as a whole.

Development of skill in fitting activities of daily living into the minutes and hours of the day conserves emotional and physical energy and stimulates greater efficiency in work. This also leads to greater mental flexibility in the management of energy and in carrying out activity plans.

Work simplification, the effective use of the body in housework, and the skillful performance of homemaking tasks are really tools which enable a homemaker to conserve time and energy so that more will be available for other interests and activities. The following chapters show how these tools may be used in controlling the work plan in action.

Evaluating Energy Management

Much of the discussion on evaluating the management of one's time on page 126 applies also to the evaluating of one's energy management. Asking one's self the following questions will help to evaluate one's success in utilizing one's store of energy.

- Do I think of the use of energy in terms of the goals I wish to attain?
- Do the energy costs of any homemaking tasks seem too high?

Am I using my energy effectively?

Have I worked out a well-balanced energy-spending pattern for both my homemaking and my other activities?

Do I often lengthen my work day in order to finish certain tasks?

What homemaking activities do I like best?

What ones do I dislike? Why do I dislike these activities?

How can I change my attitudes toward these activities?

What tasks are most tiring? Why?

Do I tire easily?

Do I recognize the type of fatigue I frequently experience?

Does it make me want to stop work?

What can I do to relieve fatigue?

Do I use effective methods of work to avoid fatigue?

Have I learned to relax and rest?

Additional References

- Bartley, S. Howard, "Fatigue and Inadequacy," *Psychological Review*, Vol. 37 (July, 1957), pp. 301-302.
- Blood, R. D., "The Division of Labor in City and Farm Families," *Marriage and Family Living*, Vol. 20, No. 2 (May, 1958), pp. 170-174.
- Bratton, Esther Crew, "Concepts of Energy and Work in Home Management," *Journal of Home Economics*, Vol. 51 (February, 1959), pp. 102-104.
- Bratton, Esther Crew, *Some Factors of Cost to the Body in Standing to Work and Sitting to Work Under Different Postural Conditions*, Cornell Univ. Agr. Exp. Sta. Memoir 365, June, 1959.
- Brouha, L., "Fatigue-Measuring and Reducing It," *Advanced Management*, Vol. 19 (1954), pp. 9-19.
- Ebaugh, F. G., "Psychological Aspects of Kitchen Fatigue," *The Kitchen Reporter*, published by Kelvinator Kitchen, June, 1953.
- Gross, Irma H., and Elizabeth Walbert Crandall, *Management for Modern Families*, New York: Appleton-Century-Crofts, 1954.
- Gross, Irma H., "Fatigue in Relation to House Care," *Journal of Home Economics*, Vol. 42 (December, 1950), pp. 794-796.
- Gross, Irma H., and S. Howard Bartley, "Fatigue in House Care," *Journal of Applied Psychology*, Vol. 35 (June, 1951), pp. 249-281.
- Morgan, Clifford T., *Introduction to Psychology*, New York: McGraw-Hill Book Company, 1956, Chapter 17.
- Updegraff, Robert R., *All the Time You Need*, Englewood Cliffs, N. J.: Prentice-Hall, 1958, Chapter 5.
- Wright, Mary and Russel, *Guide to Easier Living*, New York: Simon and Schuster, 1950.

8

Work Simplification in Time and Energy Management

ANYONE WHO IS TRYING to lower time and energy expenditures soon learns the value of improving methods of work, since the time and energy required to do any task depend largely on the hand and body motions used. Improvement in the performance of a task usually means that the work is made easier because the new method is a more convenient one, permitting smooth, natural, and rhythmical motions.

Two time- and work-reducing ideas—work simplification and motion-mindedness—may be used by everyone. Work simplification is the conscious seeking of the simplest, easiest, and quickest method of doing work. Motion-mindedness is an awareness of the motions involved in doing a task and an interest in possible ways of reducing them.

✓ *Techniques of Work Simplification*

Attention was first focused on work simplification through research carried on in the industrial field. Motion and time studies showed that improvements in methods of work not only eliminated useless motions but also saved the time and energy of the worker.

Work simplification research consists of making motion and time studies of the work as it is being done; analyzing the work

methods; developing the easiest and most effective way to do the task; and putting the new method into use.

Some of the techniques used for motion and time studies are: the pathway chart, the process chart, the operation chart, and micromotion film analyses. The *pathway chart* is a simple device for making a motion and time study in the home. A floor plan drawn to scale and fastened to drawing board or wall board, pins, and thread are all that are needed to make such a study. Pins are put in on the floor plan where the worker turns, and the line of travel or pathway is measured from thread wound around the pins as she works. After a study of this process, a revised plan can be made on another floor plan.

The *process chart* is a step-by-step description of the method used in doing a task. It shows the flow of movement in the task and is most helpful in calling attention to unnecessary steps and motions. The *operation chart* is used in making a more detailed study of some particular part of the process. In this chart the movements are broken down into the activities of both the right and left hand. The finer analysis shows where unnecessary motions are being made and where delays occur in work. Both process charts and operation charts are useful motion- and time-study techniques. They require no special equipment and their use produces astonishing results. *Micromotion film analysis* is primarily a research technique and applies best to tasks that can be easily filmed. Motion pictures of tasks done under normal conditions make a permanent record that can be analyzed and charted to show the work of the hands or other parts of the body used in the operation. By means of a timing device, the time of each movement of the worker can be accurately recorded.

The cyclegraph, a photographic device, is also used to study types of motions used in performing tasks. When this is attached to some portion of the body, such as the hand when ironing is being done, it registers the pathway of light projected by a small electric bulb. The resulting record shows whether the movements are smooth and rhythmic or nonrhythmic. This method is an effective way of learning how motions can be reduced and how methods of work may be improved in doing a task. One of the newest devices now being tested is the chronocyclegraph. By using small lights on the middle finger of each

hand, patterns of simple and intricate tasks can be photographed and recorded on a film.

Work-Simplification Studies of Homemaking Tasks

In recent years work-simplification techniques have been used by research workers in home economics and other fields to improve work methods in homemaking. Motion and time studies have been made of such tasks as food preparation, dishwashing, laundering and ironing, bedmaking, cleaning, and a number of other tasks. Efficient kitchen arrangements, tools, equipment, storage facilities, and correct heights for work surfaces, chairs, and stools have also been studied.

These studies suggest many methods of simplifying homemaking tasks, which may be used or adapted by homemakers in their own homes. They show how motion and time studies may be applied to any work problem in the home. Trying out new work patterns and adjusting them to meet new situations add interest to the work. Family members are also kept on the lookout for other ways to make tasks easier, to lessen fatigue, and make work more fun. The value of this research and its application in the home can best be seen through a careful review of some of these studies.

✓ **Food Preparation**

A study made by Heiner on simplifying the preparation of mashed potatoes (scrubbing, paring, mashing) tested various kinds of scrubbing brushes, paring tools, and potato mashers, and developed time-saving procedures for each process. Her general conclusion was that the organization of the work center and the simplification of work method are more significant factors in the control of time and motion than is the tool used. Tools recommended were a large wire-twisted bassine fiber brush for scrubbing, a slot-type knife with double-edged floating blades set as an extension of the handle for paring, and a looped wire masher for mashing potatoes.¹

¹ Mary K. Heiner, "Simplifying Home Preparation of Potatoes," *Journal of Home Economics*, Vol. 35 (December, 1943), pp. 646-652.

Studies of preparing spinach and lettuce were made by Gross and Everett.² The main objective was to study the promotion of the use of the left hand in household tasks. The procedure used was to observe 25 homemakers doing these tasks in their accustomed ways in their homes. From these observations an average composite method for each task was developed. This was based on the actual elements of procedure of the largest number of homemakers. This method was then filmed and analyzed and a revised composite method for each task was developed from the best observed elements. This new method was then filmed. Reduction in time between the revised and average methods was 21.5 percent for preparation of spinach. No reduction in total time was obtained for preparation of lettuce. With one exception the process was slower when both hands were used than when the right hand was used alone. The one exception was shaking water off lettuce leaves.³

A time and motion study in home canning reported by Lindeman proves the possibility of simplifying a task such as the canning of green string beans.⁴ The first step in this study was the making of a process chart of the job as it was being done. This chart showed that the entire canning process required 169 separate operations. It involved 109 trips from one work area to another or 719 feet of walking; and it extended over a period of 279 minutes or 4 hours and 39 minutes. Plan A charts the paths of travel in the original canning process. (See page 159.)

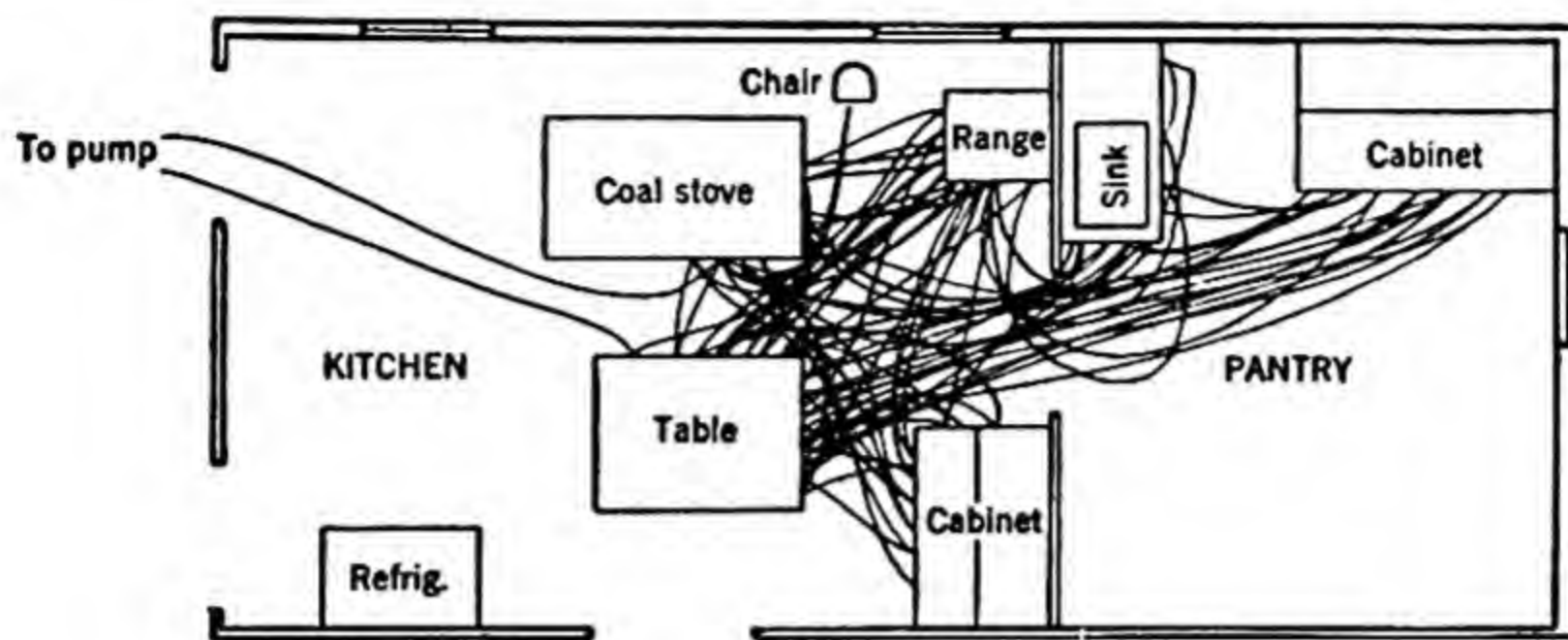
An analysis of the process chart to determine what, if any, improvement could be made in the present method was the second step. After careful questioning of the present method, it was found that changes could be made that would save 52 operations and 417 feet of walking. Plan B shows the paths of travel after the first revision of the original process.

The third step, which involved a study of the advantages of additional equipment and changes in the work area, resulted

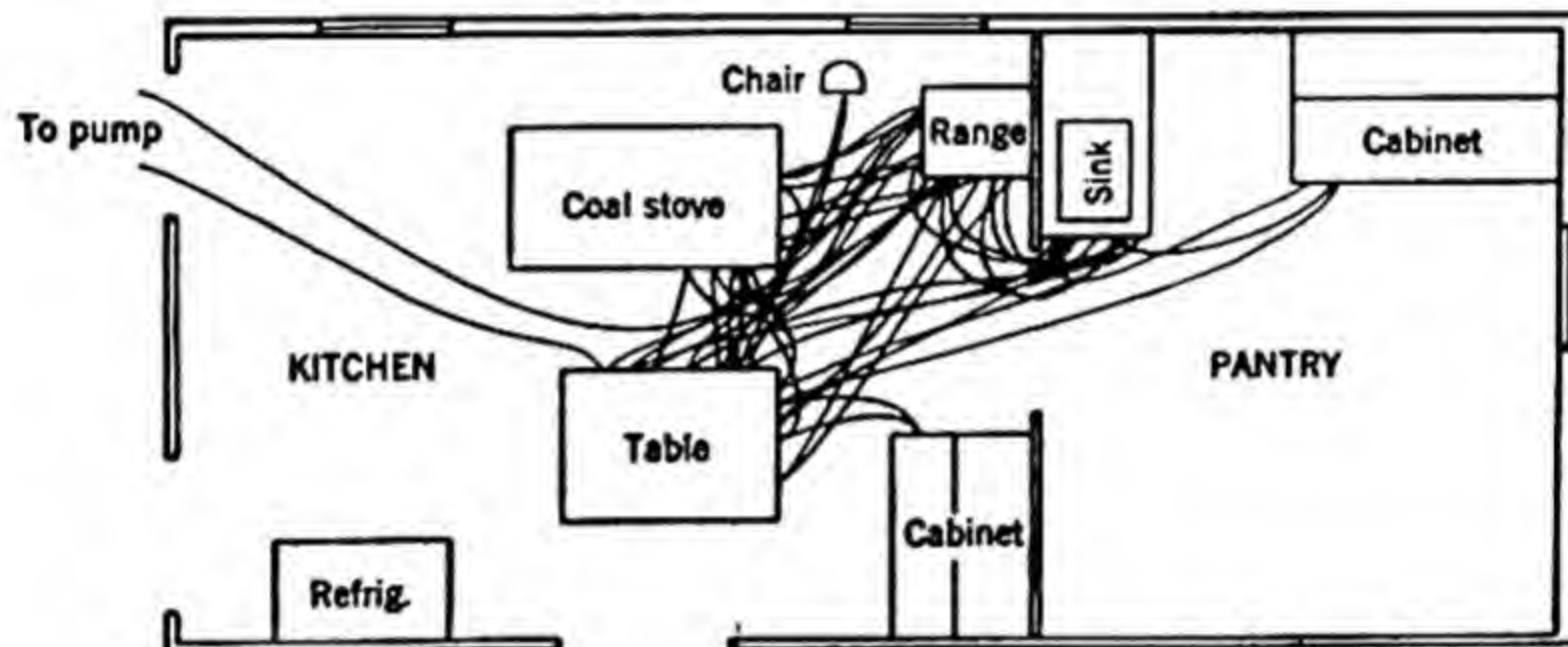
² Irma H. Gross and Esther Everett, "Research in Work Simplification," *Journal of Home Economics*, Vol. 37 (March, 1945), pp. 159-163.

³ Esther Everett and Irma H. Gross, *Mind Your Motions as You Work*, Mich. Exp. Sta. Folder 5 (October, 1945).

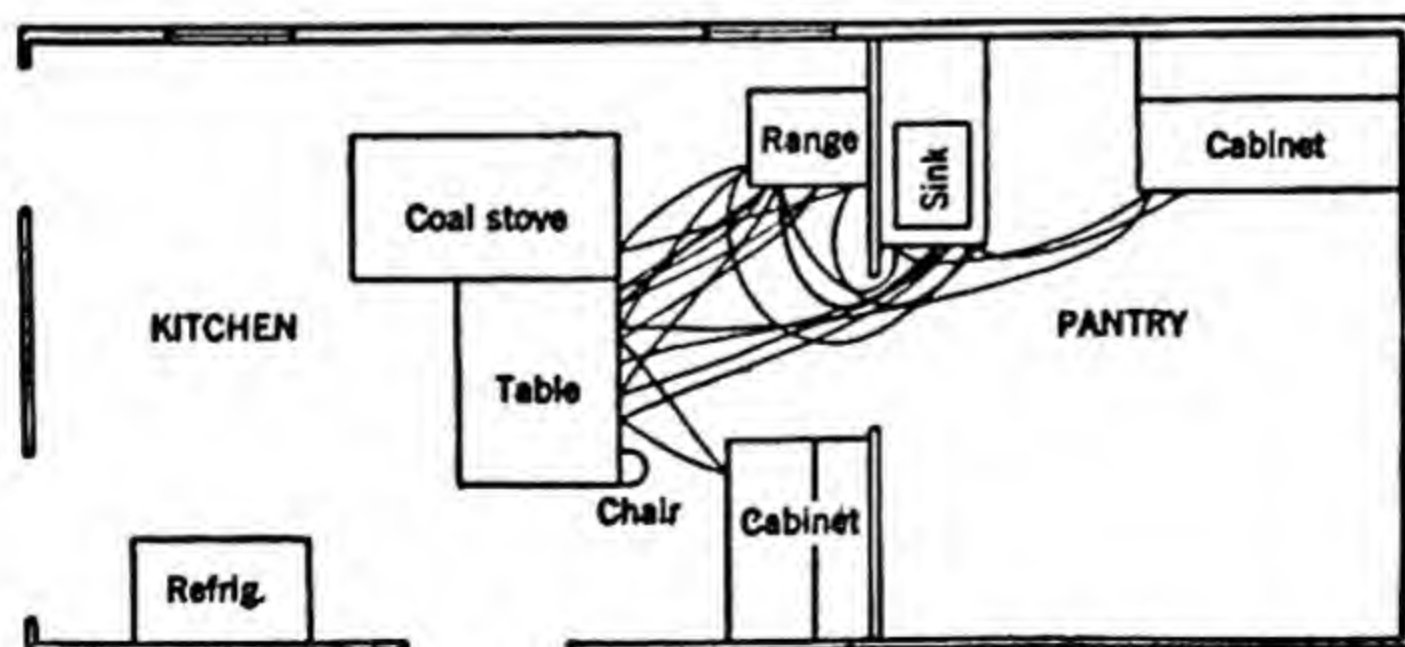
⁴ Jean Lindeman, *Time and Motion Study in Home Canning*, unpublished master's thesis, Iowa State College, 1943.



A. The paths of travel covered in the original canning process.



B. The paths of travel remaining after the first revision of the original process.



C. The revised work area with paths of travel covered in the final process.

in the revised work area shown in Plan C. In the improved and final process the work required only 90 operations and only 102 feet of walking. This process extended over 247 minutes or 4 hours and 7 minutes. Comparing this with the original method, it was found that 79 operations and 617 feet of walking were eliminated, with a saving of 32 minutes.

The bean canning process was revised on six bases:

1. Eliminating travel by careful planning before the work was begun.
2. Eliminating the use of unnecessary equipment.
3. Using utensils in a different way to ease the job.
4. Eliminating unnecessary operations.
5. Adding some equipment.
6. Changing the work area.

Leerkamp reported on work simplification in breakfast preparation.⁵ In this study the same kitchen arrangement was used for the entire period. The equipment was modern, the arrangement was efficient, the working space was adequate, and the size of the kitchen was convenient. For the most part, all phases of work were kept constant, with only a change in menu. Before preparing a meal the work was set up in a logical order of procedure. Improvements were made in the order of work when time could be saved or motions eliminated by changing the procedure. Time spent in preparing each meal was determined by the use of a stop watch, and the gross movements were determined by charting the steps on a floor plan. The time breakdown was for an entire phase of the work rather than for specific operations.

The application of motion- and time-study principles in the preparation of 12 different menus showed a saving of time from a maximum of 19 minutes in an original preparation requiring 30 minutes to no saving at all in the necessary time when applied to an original preparation requiring 6½ minutes. The average saving of time was approximately 7 minutes per menu. Decrease in the distance traveled while preparing the meal ranged from 46 feet (original distance 93 feet) to 3½ feet (original distance

⁵ Marie Leerkamp, *Work Simplification in Breakfast Preparation*, unpublished master's thesis, Purdue University, 1947.

35 feet). The greatest saving in distance was a decrease from 59 to 26 feet, or 56 percent.

The general conclusions drawn were: (1) any method of preparing breakfast can be improved and the homemaker can save either time or effort by applying the improvements to her work; (2) no specific over-all method can be set up for homemakers to use; each one must apply the principles of work simplification to her own situation.

Dishwashing

A study of dishwashing methods by Heiner and Vedder to determine the most economical method was one of the first to be made on the simplification of household tasks.⁶ After making a preliminary survey to find out typical practices in relation to dishwashing methods, equipment, and materials used, they worked out different methods and studied each separately. Dishes washed for the study were those from a day's standard menus prepared for three adults and a child. The research methods used were counting of motions by a trained worker and stop-watch timing.

Their findings show that washing the dishes once a day by hand, rinsing in hot tap water, and drying and storing in a drainer until the next period of use was the most economical of the methods tested. Total reduction in both time and motions as compared with the usual practice of washing the dishes three times a day was as follows:

Method	Motions	Time	
		Minutes	Seconds
Washing by hand three times a day	1,964	28	8
Washing by hand once a day, rinsing in hot tap water, drying, and storing in drainer until next period of use	1,008	22	58

Nelson later reported a study of dishwashing to determine whether the direction of working had any significant effect on

⁶ Mary Koll Heiner and N. Vedder, "Studies in Dishwashing Methods," *Journal of Home Economics*, Vol. 22 (May, 1930), pp. 393-407.

the efficient performance of the task.⁷ Techniques of dishwashing were studied in order to decide on the best methods to use for the study. Process charts were then made and checked for unnecessary motions and the possibility of combining motions. Four methods were developed. In Methods I and III dishes were washed from right to left, and in Methods II and IV from left to right. A shallow tray compartment sink was used in Methods I and II. In Methods III and IV a combination of shallow and deep tray sinks was used. Micromotion studies were made of each method of dishwashing.

The study showed that Method III—washing from right to left and rinsing in the deep sink in water at a temperature at least 170° F. for 2 minutes—was the most economical in motions and time for both hands. The main motion saving occurred in removing the drainer with the dishes from the rinse water in the deep side of the combination-type sink. The drainer was fitted with long handles which made this process very easy. This eliminated the use of tongs, which were necessary when removing dishes to the drainer from the rinse in the shallow tray compartment sink. Method III also took the least time for dishwashing.

The results indicate that a saving in motions and time is gained by washing dishes from right to left, and that deep-sink methods are more efficient than the shallow-sink methods.

Another study on work simplification in dishwashing was made by Goble.⁸ After making a survey of 278 homes, she selected the five most commonly used methods of dishwashing and studied them by micromotion analyses. From this study a new method was developed for kitchens with and without sinks.

In making this study the same luncheon was served in the home management house to four persons each day. A film was made of (1) assembling dishwashing materials; (2) washing, rinsing, drying, and storing dishes; and (3) cleaning up and putting away equipment.

In developing the new methods, hand and body motions were

⁷ Gladys M. Nelson, *A Study of Dishwashing Methods from Right to Left and from Left to Right by Means of Micromotion Analysis*, State College of Washington, unpublished master's thesis, 1947.

⁸ Eva Goble, "Work Simplification in Dishwashing," *Journal of Home Economics*, Vol. 40 (April, 1948), pp. 195-196.

saved by storing equipment near the sink and work table where dishes were washed and by improvements in the actual washing of dishes. The dishes were stacked on the right drainboard and washed from right to left. It was found that the time saved by the improved sink method over the best of the four original sink methods ranged from 8 to 21 percent. The time saved by the improved sinkless method was 23 percent, or 4.17 minutes shorter than the original sinkless method.

From this study the following principles of motion economy in dishwashing were developed.

1. Wash the dish at water level to eliminate carrying water in the cloth to the dish.

2. Wash the dish with a circular movement in order to move in the easiest manner and to allow the dish cloth to be self-dipping in the action.

3. Retain cloth in right hand (if right-handed) except when reaching for dishes.

4. After washing one item move hand with cloth to next item to be washed. This positions the cloth while the left hand disposes of the washed dish.

5. Dispose of washed dish with the hand nearest the drainer or tray. Reaching across the body to dispose of a dish requires a longer time and more motion.

6. Use the left hand to pivot the dish during the washing process instead of turning it with both hands.

7. When drying dishes, save motion by holding one end of the towel in each hand, keeping the hands close together and close to the dishes.

Bacteriological tests of dishes rinsed with water at 192° F. showed that they passed the United States Public Health Standard every time.⁹ The dishes rinsed under the faucet water at 120° F. passed only once out of four times.

A comparison of hand and mechanical dishwashing methods was reported recently by Weaver, Bloom, and Feldmiller.¹⁰ The

⁹ Eva Goble, *Work Simplification in Dishwashing*, unpublished master's thesis, Purdue University, 1947.

¹⁰ Elaine Knowles Weaver, Clarice E. Bloom, and Ilajean Feldmiller, *A Study of Hand Versus Mechanical Dishwashing Methods*, Ohio Agr. Exp. Sta. Research Bul. 772, 1956, pp. 15, 18.

TABLE 7. COMPARISON OF TIME SPENT FOR EACH OF THE STEPS REQUIRED IN HAND AND MACHINE DISHWASHING PROCESSES *

Steps in Dishwashing Process	Method			
	Hand	Machine	Hand	Machine
	Minutes		Percent	
Clearing table	2.04	1.59	5.5	8.1
Scraping and/or rinsing, and stacking or loading dishwasher	4.48	7.63	12.1	38.8
Putting away leftovers	2.71	1.64	7.3	8.4
Disposal of garbage and/or feeding pets	0.57	0.45	1.5	2.3
Preparation for hand washing	1.15	0.56	3.1	2.8
Hand washing and rinsing	13.09	3.32	35.3	16.9
Wiping	8.29	1.12	22.4	5.7
Cleaning up	4.74	3.35	12.8	17.0
Totals	37.09	19.66	100	100

* Elaine Knowles Weaver, Clarice E. Bloom, and Ilajeane Feldmiller, *A Study of Hand Versus Mechanical Dishwashing Methods*, Ohio Agr. Exp. Sta. Research Bul. 772, 1956, pp. 15, 18.

time spent for each of the steps required in the hand and machine dishwashing processes are given in Table 7.

The daily time records showed that the time spent when washing dishes by hand averaged 73.2 minutes or one and one-quarter hours a day. During the 30-day machine dishwashing period, they averaged 35.6 minutes. Figured on an annual basis, the time spent by cooperators in this study averaged 445 hours, or 63.1 eight-hour working days per year, when the dishes were hand washed, and 218 hours, or 27.1 eight-hour working days a year, when they were machine-washed. This represents a time reduction of 36 eight-hour working days a year.

✓ Laundering

Eyres made a careful study of the relationships of washing units and equipment in a washing area.¹¹ The object was to determine the most efficient arrangement for a washing area.

¹¹ Ruth Eyres, *A Study of the Relationships of Washing Units and Equipment in a Washing Area*, unpublished master's thesis, State College of Washington, 1947.

Three washing area arrangements were used in this study. Each one had four units: (1) wash unit, (2) sorting unit, (3) starch unit, and (4) the clothesline.

In Arrangement I the sorting table was placed to the right of the tubs and machine, and the clothesline was to the left of the tubs. The sequence of work was from right to left.

In Arrangement II the sorting table was placed opposite the tubs and machine, and the lines were located to the left of the tubs. In this plan the work was also from right to left.

Arrangement III was the reverse of Arrangement I. The sorting table was to the left of the tubs and the lines were to the right. In this case the work proceeded from left to right.

A washing for a family of three, which averaged between 42 and 46 pounds, was done in each of the washing areas.

It was found that Arrangement I was the most efficient of the three, so far as trips between units were concerned. It was 8 percent more efficient than II and 11 percent more efficient than III. Also the fewest motions were used in Arrangement I, which was 20 percent more efficient than Arrangement II and 18 percent more efficient than III. Arrangement I was recommended as the one which results in motion economy.

It was also shown that there is a close relationship between the washing unit and sorting unit, the washing unit and starch unit, and the washing unit and clothesline. Because of the many trips and steps between these units, they should be placed as close together as possible.

When Knowles investigated the effects of the height of ironing surfaces on homemakers, she found that there is need for boards that are adjustable in height since persons of different proportions use the same equipment in the home. More energy than necessary is used by workers who iron at surfaces that are not of comfortable height.¹²

Muse found in a study of seating housewives at their ironing that considerable adjustment in height of chair seat and ironing board was necessary in order to find comfortable working heights

¹² Elaine E. Knowles, *Some Effects of the Height of Ironing Surface on the Worker*, N. Y. Agr. Exp. Sta. Bul. 833, 1946, pp. 14-55.

for the 25 homemakers in the study.¹³ The height of ironing board preferred for sitting ranged from 20 to 25 inches, and the height of chair seat preferred ranged from 13¾ inches to 17¾ inches.

A comparison of automatic drying with out-of-door drying of clothes was made by Weaver and Thomas.¹⁴ They found that the labor saving and convenience features of the dryer have been responsible for its phenomenal acceptance. Its use not only saves time, but it has eliminated:

Carrying and tugging baskets of wet clothes from the laundry to out-of-doors.

Reaching, stretching, bending, stooping to hang and remove clothes from lines.

Weather conditions obviously have no influence on the day or time of day washing is done, since the dryer can be used any time.

Line drying for each 8 pounds of clothes required 625 steps and 57.5 minutes from the washer to hang clothes, later remove and fold them from the line and return to the laundering area. Dryer drying required only 3 steps and 9 minutes in the process of loading the dryer from the washer, removing and folding the clothes. About one-sixth the amount of time was required for the operations of the worker. Only a few bends were necessary to load and unload the dryer, thus eliminating the carrying, lifting, stooping, and stretching necessary for hanging and removing clothes from the line. A dryer can be used with both a wringer-type machine and an automatic washer.

Bedmaking

✓ One of the first studies of bedmaking was reported by Muse. An analysis of six different methods showed that many steps and hand operations can be saved by making a bed completely from one side or at one corner of the bed before going to another.¹⁵

¹³ Marianne Muse, *Seating Housewives at Their Ironing*, Vt. Agr. Exp. Sta. Bul. 559, 1951, p. 14.

¹⁴ Elaine K. Weaver and Margaret Thomas, *Automatic Drying Versus Out-of-Door Drying*, Ohio Agr. Exp. Sta. Bul. 734, 1953, pp. 5, 35.

¹⁵ Marianne Muse, *Saving Time and Steps in Bedmaking*, Vt. Agr. Exp. Sta. Bul. 551, 1949, p. 3.

A motion and time study of bedmaking made by Mundel and Armstrong of Purdue University is described and pictured in *Life*.¹⁶ This study is based on the improved method of bedmaking worked out by Muse. In this method the bed is made in one trip around. The work is done facing either side of the bed, which is made completely one-fourth at a time, beginning at the head and working around the bed. The sheets, blanket, and spread are placed on the bed from one position, the upper right-hand corner. After tucking in the bedclothes at this position, the same procedure is repeated around the bed until the last corner is reached. The sheets were folded lengthwise twice and then widthwise when ironed. This makes it easier to spread them on the bed.

It was found that the common method of bedmaking which requires many trips around the bed with the individual placement of each cover takes from 4 to 5 minutes and the distance walked is about 60 feet. With the improved method worked out by Mundel and Armstrong, a bed can be made in 2½ minutes in one 15-foot trip around it.¹⁷

✓ Cleaning

Wilder found in a study of cleaning a living room that an improved method of weekly cleaning over the original method saved a total of 660 feet, 650 movements, 53 operations, and 33 minutes.¹⁸

By using an improved method of doing the daily cleaning, a 53 percent saving of time was effected, and a better planned method of dusting resulted in a 76 percent saving of time.

An improved method of disassembling the vacuum cleaner saved 52 percent of the time used in the original method.

The improvement of a wall-cleaning method was studied by Haniman. Micromotion analysis was made of the original and

¹⁶ Marvin E. Mundel and Janet Armstrong, "Easier Housekeeping," *Life*, Vol. 21 (September 9, 1946), pp. 97-107.

¹⁷ *Easier Homemaking*, Purdue Univ. Sta. Bul. 529, 1948, pp. 21-24.

¹⁸ Josephine Wilder, unpublished thesis, Purdue University, 1950. Reported by Cleo Fitzsimmons, Eva Goble, and Gertrude Monhaut in *Easy Ways*, Purdue Univ. Agr. Ext. Serv., Extension Bul. 391, 1952, p. 25.

the new operations. The following improvements in the work pattern resulted in a 29 percent increase in output.¹⁹

- a. Use of pre-determined pattern in going over the walls.
- b. Use of the largest tool that will do the work.
- c. Clearing large flat surfaces before starting to do the work.
- d. Placing cleaner so that largest area can be reached without moving the cleaner.

A study of washing a door was made by Everett and Gross as part of another project. (See page 158.) Reduction in time between the revised and average method was 10 percent.²⁰

Kitchen Arrangements

The findings of another study made by Muse illustrate how time and steps may be reduced in preparing meals through changes and arrangement of kitchen equipment. Her research techniques included making informal process charts, measuring distances walked, and timing with a stop watch. Part of the study was made in farm kitchens and part in a laboratory kitchen. In the former, the steps and time taken by the homemakers in preparing the day's meals and in clearing away afterward were recorded. The kitchens were then rearranged and the number of steps and time spent in the same activities were again measured. In one of the kitchen studies, a saving of 2,191 steps and 1 hour and 3 minutes of time each day was achieved in the improved kitchen.

In the laboratory kitchen, a dinner for five persons was prepared and served and the dishes washed and put away. In this study nine specific changes were made in succession to see what effect each would have upon the task. The changes made and the saving in time and steps are given in Table 8.

The advantages of the improved kitchen are shown by the fact that only 131 steps and 2 hours and 6 minutes were required to do the same work that took 1,516 steps and 3 hours and 46 minutes in the original kitchen. This means the release of 45

¹⁹ Ann Haniman, unpublished thesis, Purdue University, 1950. Reported in *Easy Ways*, *Ibid.*, p. 26.

²⁰ Esther Everett and Irma H. Gross, *Mind Your Motions as You Work*, Mich. Exp. Sta. Folder 5 (October, 1946).

TABLE 8. SAVINGS IN TIME AND STEPS THROUGH CHANGES IN KITCHEN EQUIPMENT AND ARRANGEMENT *

Changes Made	Amount of Time Spent		Time Saved over Preceding Plan, Min.	Number of Steps Taken	Steps Saved over Preceding Plan
	Hr.	Min.			
1. Original layout	3	46		1,516	
2. Stack table added	3	32	14	1,377	139
3. Drainboard added	3	11	21	1,413	234
4. Wheel tray added	3	4	7	754	389
5. Utensils rearranged	2	59	5	586	168
6. Food rearranged	2	54	5	368	218
7. Oil stove in place of wood	2	45	9	306	62
8. Compact arrangement	2	28	17	152	154
9. Electric range in place of oil stove	2	25	3	140	12
10. Electric mixer added	2	6	19	131	9

* Adapted from *Kitchen Equipment and Arrangement*, by Marianne Muse, Vt. Agr. Exp. Sta. Bul. 375, 1934, p. 19.

percent of the homemaker's time and the elimination of 91 percent of the steps. A study of this table shows that the additions of equipment were responsible for the saving of 42 minutes and 762 steps, which was nearly half of the time saved and over half of the steps. Changes in arrangement of equipment saved 21 minutes and 83 steps.

In studies made at the Purdue Motion and Time Study Laboratory, Armstrong and Mundel compared the effect on ease of kitchen work of the three standard arrangements of kitchens: the strip, or two-wall, kitchen, the L-shaped kitchen, and the U-shaped kitchen.

Motion pictures were taken of the preparation of a meal for four people in each of the three types of kitchen. Within the conditions of the study the U-shaped kitchen proved the most effective. It was found that it took from 35 minutes in the U-shaped kitchen to 58 minutes in the strip kitchen to prepare the meal. The working steps in the strip kitchen amounted to

454 in the preparation of the meal, 286 in the L-shaped kitchen, and 262 in the U-shaped kitchen.

The greatest number of trips was made between the range and sink, the sink and dish storage, and the dish storage and dining table. The most time was spent at the sink center in all of the kitchens.

The following conclusions regarding arrangement were given as worthy of consideration:

1. It is desirable for the range and sink to be relatively close together.

2. The sink and dish storage should be close together.

3. The range to refrigerator travel is more important than refrigerator to sink travel.^{21, 22, 23}

A study by Wiley also shows the effect of major equipment and the location of working units in different-shaped kitchens on efficiency.²⁴ A dinner menu was prepared three times in each of six kitchens. Three different variations of a U-shaped kitchen, one broken U-shaped kitchen, and two wall types were used. The six kitchens, which were located in different homes, were about the same size, each having the sink, refrigerator, mixing unit, and range in different locations in the room. The number and kind of utensils and staple supplies used were the same in each kitchen unit. Both were stored in approximately the same location in each kitchen unit.

In this study the two-wall kitchen required the fewest motions in meal preparation, the U-type kitchen required the fewest trips, and the broken U-type kitchen required the least number of steps.

Heiner and Steidl made a more recent study of how kitchen arrangements affect the preparation of meals. They determined the travel costs for preparation, for clearing, and for the entire meal in nine L-shaped kitchen layouts. A standardization process-trip chart, based upon motion and time study procedures,

²¹ Mundel and Armstrong, *op. cit.*, pp. 97-107.

²² Marvin E. Mundel, "Factors Affecting Ease of Kitchen Work," *The Kitchen Reporter*, published by Kelvinator Kitchen, March, 1947.

²³ *Easier Homemaking*, Purdue Univ. Sta. Bul. 529, 1948, pp. 3-17.

²⁴ Elizabeth Weeks Wiley, *A Study of the Working Units and Major Equipment in a Kitchen*, unpublished master's thesis, State College of Washington, 1947.

was developed for each meal and applied to all layouts. The figures showed that the travel cost for preparation in each meal was greater than for clearing. Travel costs and the operations involved were also affected by the type of meal prepared.²⁵

The percentage of trips between areas for the preparation and clearing of two dinners in the kitchens having china storage at the place of first use is illustrated in Figure 12. The trips within the sink area and the frequent trips between the sink and the other areas in both preparation and clearing indicate the importance of the sink center and the changing importance of the other areas with the part of the meal being prepared.

On the basis of the simple and the more complicated dinners used to test the L-shaped layouts of kitchens for city households they found that:

The sink was the area of most frequent use.

The range ranked second in use, but was the area of most frequent inspection.

The mix center ranked third.

The refrigerator, china, and dining areas were about equal in rank (fourth).

To keep travel distances low, it is important to have the more closely related areas placed reasonably close together in the kitchen. Counter space between areas helps reduce needless travel, for it provides a stacking, loading, and holding zone at the place where it is needed.

In a study of considerations in planning kitchen cabinets, Wilson states that "measures for width and height of a specific work surface depend on the kind of work done there, the equipment and supplies assembled, the width of the surface, and the position (standing or sitting) of the worker."

The widths of work surfaces that were found most convenient for use in the various kitchen tasks are given in Table 9. These widths were determined through experimentation during which each task was done as the average homemaker prefers to do it.

²⁵ Mary Koll Heiner, and Rose E. Steidl, *Guides for Arrangement of Urban Family Kitchens*, Cornell Univ. Agr. Exp. Sta. Bul. 878, 1951.

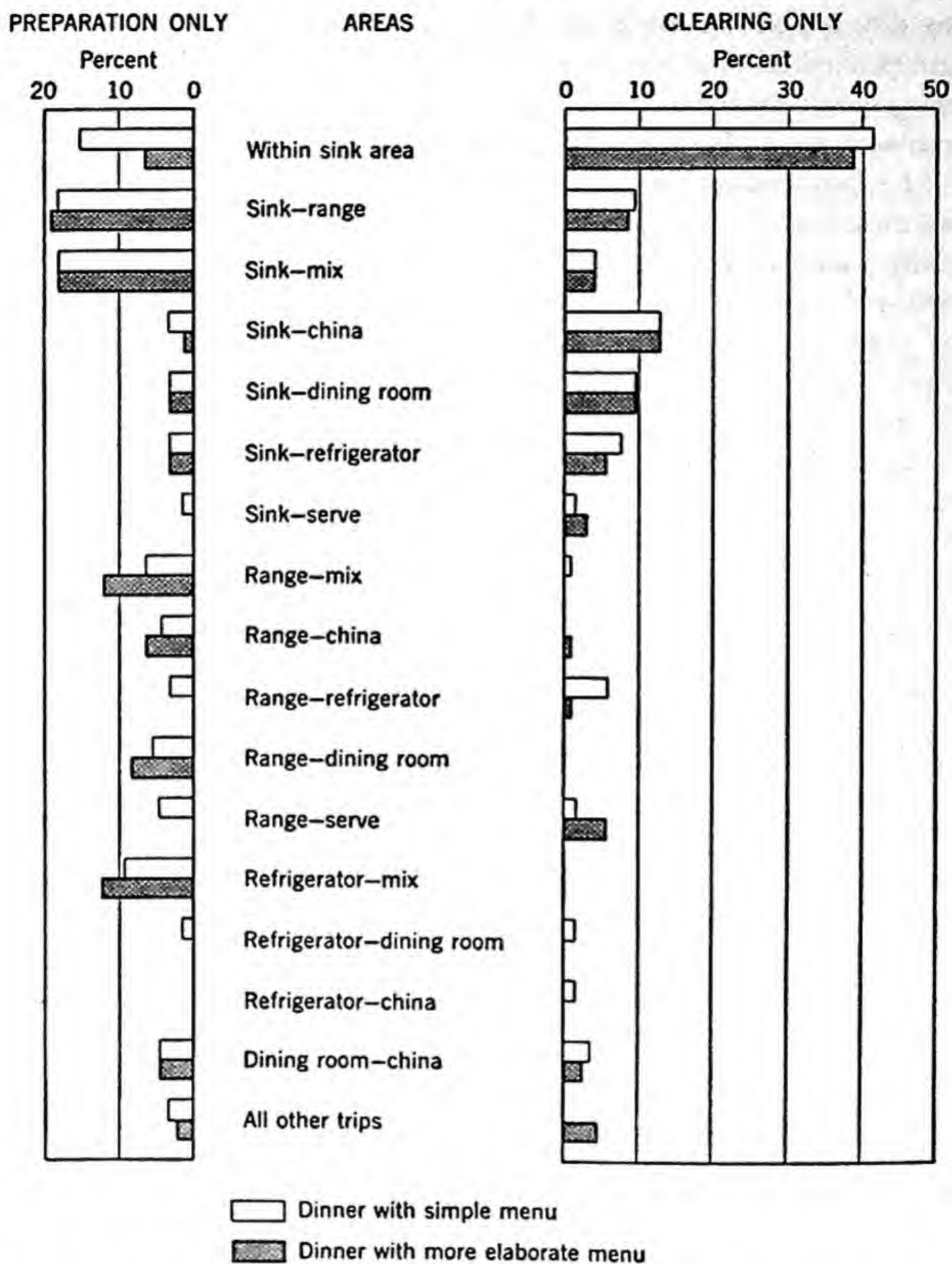


Figure 12. The percentage of trips between areas for preparation and clearing of two types of dinners in kitchens having china storage at the place of first use. (From *Guides for Arrangement of Urban Family Kitchens*, Mary Koll Heiner and Rose E. Steidl, Cornell Univ. Agr. Exp. Sta. Bul. 878, 1951, p. 31.)

TABLE 9. SUGGESTED MINIMUM WIDTHS OF KITCHEN WORK SURFACES, AND AREA-DETERMINING PROCESSES *

Area	Minimum Width, Inches	Process
Counter at left of sink	32	Draining and stacking dishes
Sink bowl	30	Washing and rinsing dishes
Counter at right of sink	36	Scraping and stacking dishes
Surface adjacent to range	21	Serving hot foods
Mixing surface—free standing	36	Making pies (supplies assembled)
Mixing surface—adjacent to another unit	28	Making pies (supplies assembled)
Serving counter—free standing	28	Arranging salad plates
Serving counter—free standing	36	Arranging dinner plates
Surface near open side of refrigerator	15	Placing dishes taken from refrigerator
Planning desk	28	Writing while seated at center of desk

* Maud Wilson, *Considerations in Planning Kitchen Cabinets*, Ore. Agr. Exp. Sta. Bul. 445, 1947, p. 26.

Recent unpublished studies by McCullough based on space needs for the use of counters in the kitchen gave the following recommendations for counter widths:

	Minimum Width, Inches	Preferable Width, Inches
Counter at left of sink	32	36
Counter for mixing and food preparation	42	54

Table 10a lists the minimum heights of work surfaces for the average woman in relation to position (standing, sitting) and in relation to the movements required. If the process requires the manipulation of tools (such as an egg beater or stirring spoon), the range in heights is less than that of a process requiring only the handling of supplies and dishes, as in the case of stacking and drying dishes or slicing bread.

Table 10b gives heights that are suited to the average homemaker. If the sink is to be used for dishwashing, its floor should

TABLE 10. HEIGHTS OF WORK SURFACES SUITABLE FOR THE AVERAGE WOMAN ***a. Range in height in relation to movements required by process**

Position of Worker	Movements	Range in Height of Surface from Floor
		Inches
Standing	Manipulation of tools in doing hand beating; stirring; kneading	31 to 34
	Handling of supplies and equipment; slicing; cutting	30 to 38
Sitting	Manipulation of tools in doing hand beating; stirring; kneading	24 to 28
	Handling of supplies and equipment	24 to 32

b. Suggested heights for specific surfaces

Position of Worker	Surface	Height of Surface from Floor
		Inches
Standing	Floor of sink	32½
	Counter on level with rim of sink 6 inches deep	38½
	Mixing table	32
	Cooking surface of range	32
	Sewing (cutting, basting)	35½
	Pastry board in use	33½
Sitting	Kitchen planning desk	28
	Lap table or pull-out board	24

* Maud Wilson, *Considerations in Planning Kitchen Cabinets*, Ore. Agr. Exp. Sta. Bul. 445, 1947, p. 28, adapted from standards described in Ore. Agr. Exp. Sta. Bul. 348, *Standards for Working Surface Heights*, and unpublished results of studies of range heights made by the Washington State Experiment Station.

be set high enough to be suitable for that purpose. For the average woman, this measure should be 32½ inches from the floor. When the adjacent work counters must serve both for stacking dishes and preparing food, the counter on the level with the rim of the sink may be too high for such tasks as beating, paring, and chopping. In this case one of the sink counters may be set lower than the sink rim, or a pull-out board may be used for operations that require a lower working surface.

The maximum heights and the minimum width of working chair and stool, as well as the preferred heights of equipment used by homemakers while seated in a work chair, were reported by Wilson, Roberts, and Thayer as follows: ²⁶

Equipment	Inches
Maximum height of seat of work chair	16
Minimum width of seat of chair or stool	14
Height of seat of stool for use at sink	
Sink 8 inches deep	31
Sink 7 inches deep	30
Sink 6 inches deep	29
Sink 5 inches deep	28
Kitchen planning desk	25
Mixing table	24
Ironing board	24
Sewing table	24

Heiner and McCullough,²⁷ who conducted studies on functional kitchen storage, recommended the following dimensions:

Maximum height for shelves	72 inches
Maximum depth from front to back	16 inches
Maximum side-to-side reach	48 inches
Shelves for most used items	Within 24-inch radius from elbow
Lowest point for most used items	25 inches from floor

²⁶ Maud Wilson, Evelyn H. Roberts, and Ruth Thayer, *Standards for Working-Surface Heights and Other Space Units of the Dwelling*, Ore. Agr. Exp. Sta. Bul. 348, 1937, p. 37.

²⁷ Mary Koll Heiner and Helen McCullough, *Functional Kitchen Storage*, Cornell Univ. Agr. Exp. Sta. Bul. 846, 1948.

The findings of these studies give evidence of the possibilities for motion economy in the use of the hands and body, and in simplifying work. They also show the value of well-planned work and storage centers and effective equipment and tools.

Improving Methods of Work and Working Conditions

Homemakers who wish to simplify their tasks can easily do so by making a careful study of their methods of work. The first step is to apply a questioning attitude to every task. Why is it being done? How is it being done? Can it be done with fewer motions and less time? Can any steps be left out? Can equipment and tools be rearranged so they will be handier to work with? Are the best tools being used for the job?

Questions of this sort usually lead to the next step: the making of changes necessary to improve the present method, for no one is likely to change habits unless first aware of some reason for doing so. This awareness is essential since it supplies a strong motivating force. A belief that one can improve ways of working and a realization of the gains to be had through reduced fatigue, shortened time, and greater accomplishment act as spurs to devise means of working with greater ease.

One must next realize that changing old habits is not an easy or quick process. More time and effort will be needed and more thought and attention must be given to the task while a new method is being learned. If one is interested in breaking the old habit, the change will be easier. The new way soon will become so natural that the old one will seem awkward. The time released for other responsibilities is then realized and appreciated.

A study of the way one is doing a task usually shows that some of the operations are made easier by changing the method of work and by rearranging the work place. Distances can be reduced by eliminating certain operations, by changing the storage places of utensils and tools, and by better use of the equipment.

Five Classes of Change

Mundel has classified changes that can improve one's method of work into five levels. Each higher level brings about changes in motions in the level below it. Beginning with the lowest, these classes are: (1) change in body positions and motions; (2) change in tools, workplace, and equipment; (3) change in production sequence; (4) change in finished product; and (5) change in raw material.²⁸ These five classes of change will be used as a basis for the questions and discussions which follow.

Changes in Body Positions and Motions

The focusing of attention on the motions made by the body in doing a task reveals many possible changes that can save time and energy. Keeping the house in smooth-running order requires many steps, with the possibility of great waste of both time and motions. By careful planning before work is begun, many steps may be eliminated. Making one trip take the place of several is one of the easiest ways to save steps. This may be done by carrying several things at once as one makes trips about the kitchen or up and down stairs. Trays and baskets are helpful step-saving aids.

Improving the routing of work in the home is another way of reducing steps. The making of a movement or pathway chart on the floor plan, to show the paths being traveled by a worker in doing a task, is an easy way to learn the number of trips being made and the distances being walked. Such a chart usually suggests the most logical and effective route to follow from the beginning to the completion of a task. Besides reducing steps, changes in the routing of work frequently saves unnecessary handling of equipment and supplies. For example, when dishes are stacked at the right of the sink, washed, dried, and stored at the left, a minimum of motions are required. In such tasks as the making of muffins, serving meals, laundering, and cleaning, the routing problem is more difficult to solve. These tasks call for collecting and arranging materials and equip-

²⁸ Marvin E. Mundel, *Systematic Motion and Time Study*, New York: Prentice-Hall, 1947, pp. 22-23.

ment and the clearing away afterward. The routing of each task is different and requires separate study. The main objective is to find the shortest and most direct way of doing the task.

Arranging supplies and tools within easy reach simplifies many tasks. There is a normal and easy working area for the right hand and the left hand working separately and for both working together. (See Figure 13.) The arcs for the normal working area in the horizontal plane are determined by the sweep of the hands with the forearms extended and the upper arms hanging at the side of the body in a natural position. The overlapping section is the area in which work with both hands may be done more conveniently. Arcs drawn with the arms extended from the shoulder will give the maximum working area. Each hand has its normal working area in the vertical as well as the horizontal plane in which the work may be done with least time and effort. (See Figure 14.) The maximum working area may also be determined beyond which work cannot be done without disturbing the posture. When storing materials above the working surface, thought should be given to these facts. (See pages 390 and 391.)

Adopting the practice of leaving tools and equipment in the position in which they will be used or picked up again avoids turning and rehandling. The stacking of dishes in the order in which they will be washed, ironing and folding sheets so

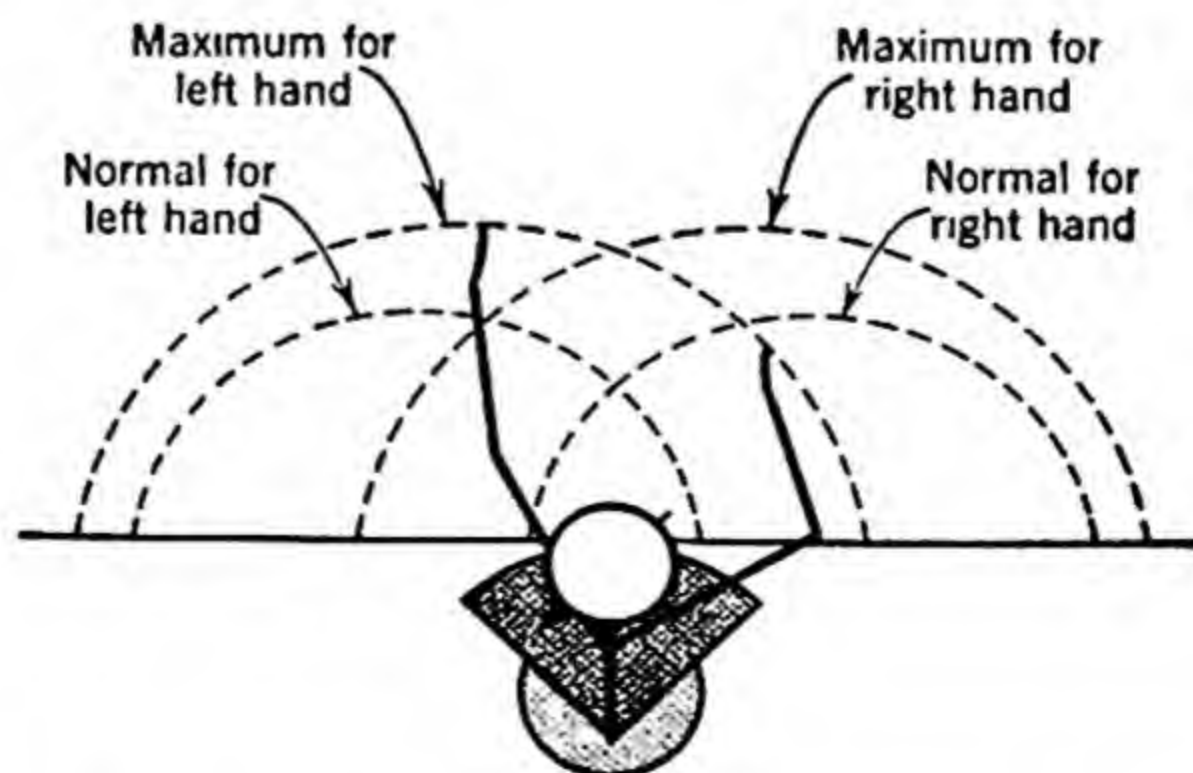
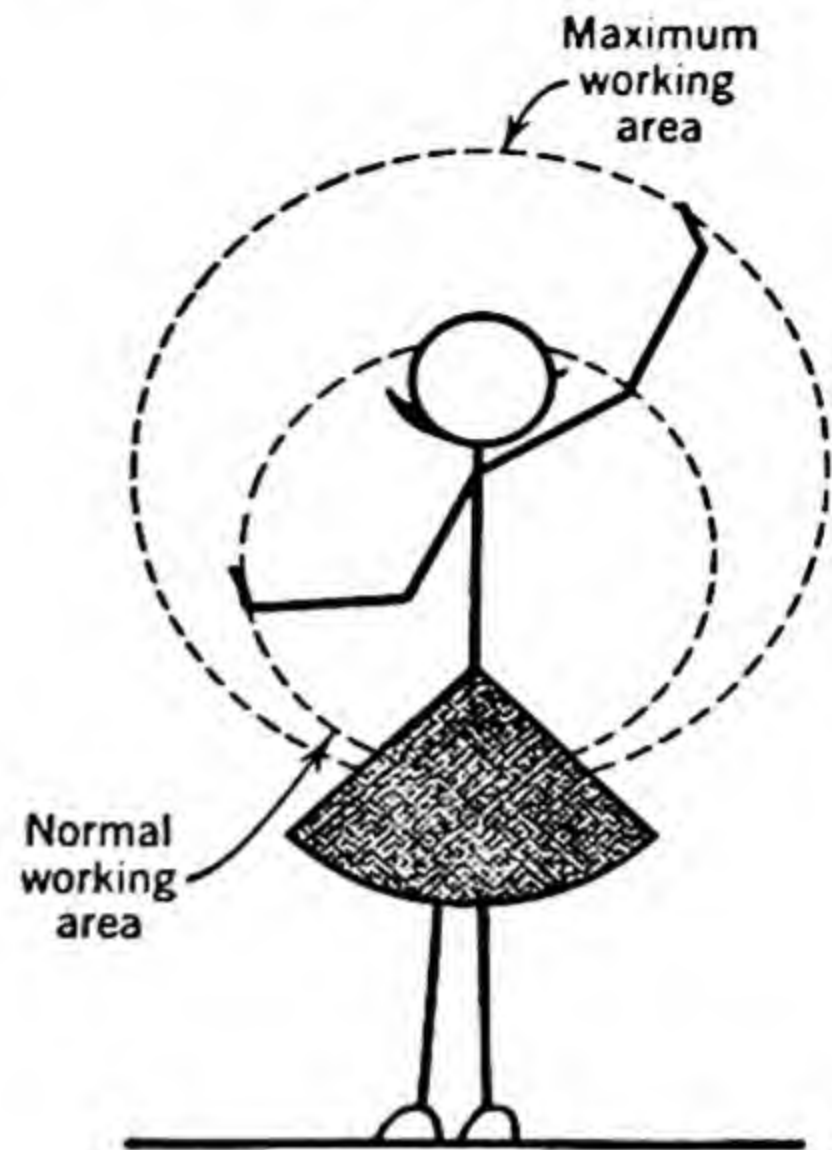


Figure 13. Normal and maximum working areas—horizontal planes.

Figure 14. Normal and maximum working areas—vertical planes.



they can be unfolded and spread with the fewest motions, storing kitchen knives so they can be seen and grasped without effort, and placing kitchen utensils and supplies where they can easily be picked up are desirable motion-saving practices.

More use of the left hand along with the right speeds up work and equalizes the use of the body. It also helps reduce the shifting of tools from left to right hand as work is being done. When attention is given to the motions made by each hand, many ways may be found to make it possible for the left hand to carry its share of the work.

Rhythm is a fundamental process in everyday living and may be used to increase our efficiency in work. Many of our body processes go on rhythmically. Our heart beats in rhythm, we breathe in rhythm, we tend to work rhythmically, and we walk and dance rhythmically. According to Burtt, "There is fundamental economy in rhythmical performance in that we get a repetition of the act without necessarily a repetition of the impulse. We do not have to make a decision each time. When we take a stroll we do not have to think 'left, right, left, right' for our successive steps. The taking of one or two steps is sort of a stimulus for taking the next few, and we do not have to make a decision each time. Some of the excitement of the first act

serves as a stimulus for succeeding acts.”²⁹ In the absence of rhythm, conscious effort and numerous decisions have to be made to carry on a task.³⁰ Thus it will be seen that if a performance can be made rhythmical it will involve fewer decisions and a somewhat greater economy of effort.

This principle of rhythm has many applications in the home. If we watch a skillful homemaker work, we will notice the rhythm and ease with which she moves and how one motion seems to flow into the next without any conscious effort. There is a rhythmical movement in the swing of the broom, in the operation of the vacuum sweeper, in the washing of dishes, in the beating of batters, in the slicing of vegetables, and in the rolling of pastry—in fact, in every skilled operation. Some homemakers work fast, others more slowly, but it will be seen that each one has a natural swing or rhythm peculiar to herself.

In repetitive activities a continuous movement is generally less fatiguing than several angular movements or straight-line motions involving sudden and sharp changes in direction, although both may be rhythmical. If the end of each movement is rounded so that the return stroke is a continuation of the forward movement, the one movement passes easily into the next. With movements of this kind, there is a definite economy of effort.³¹

An investigation of working methods in a coal mine showed that coal miners trained to swing the pick in circular fashion instead of backwards and forwards in a straight line increased their output 16 percent and also were less fatigued.³²

Another reason why rhythmic work is less tiring than non-rhythmic work is that all the “working bones” have double sets of muscles. When work is done rhythmically, one set rests while the other set works. If work is done tensely and awk-

²⁹ H. E. Burtt, *Psychology and Industrial Efficiency*, New York: D. Appleton and Company, 1929, pp. 121–122.

³⁰ C. S. Meyers, *Industrial Psychology*, New York: People's Institute Publishing Company, 1925, p. 55.

³¹ Burtt, *op. cit.*, pp. 122, 123.

³² E. Farmer, S. Adams, and A. Stephenson, “An Investigation in a Coal Mine,” *Journal of the National Institute of Industrial Psychology*, Vol. 1, No. 4 (1922), pp. 125, 178, 232.

wardly, both sets are working at once, and fatigue comes sooner.³³ Such studies as these suggest that in similar ways the homemaker may use motion economy in improving methods of work.

Some tasks are made easier by utilizing gravity. Cutting vegetables and other foods down on a board has the aid of gravity with each stroke of the knife. This method also speeds up work. For instance, instead of cutting one stalk of celery at a time, several may be cut at once.

To avoid strain and to develop a good body carriage while working, some attention should be given to posture habits in standing, sitting, stooping, and bending while at work. Good posture in doing any task may be defined as the position which requires the expenditure of the smallest amount of energy. A good standing posture is one in which the head, neck, chest, and abdomen are balanced vertically one upon the other, so that the weight is carried mainly by the bony framework and a minimum of effort and strain is placed upon the muscles and ligaments. When the body is well-balanced in the standing position, the head will be directly over the feet, and the center of gravity will pass through the middle ear, the shoulder, the hip, the outside of the knee, and the outside of the ankle.³⁴

A good sitting posture for work is a well-balanced and poised position. The weight is carried by the bony support of the skeleton, thus relieving the muscles and nerves of all strain. The poise is such that the minimum of adjustment is necessary for such action as the work may demand. The line of gravity falls through the middle of the shoulders, hips, and seat bones. The body is straight from hips to neck and there is no flex or bend at the waistline.³⁵

Poor standing and sitting postures may result in permanent changes in the spine, in positions of the joints, ligaments, and muscles, and in the location of the organs of the body. Such changes produce strains and tensions which increase the fatigue cost of homemaking tasks.

³³ Esther Crew Bratton, "Let Your Body Work for You," *The Kitchen Reporter*, published by Kelvinator Kitchen, May, 1951.

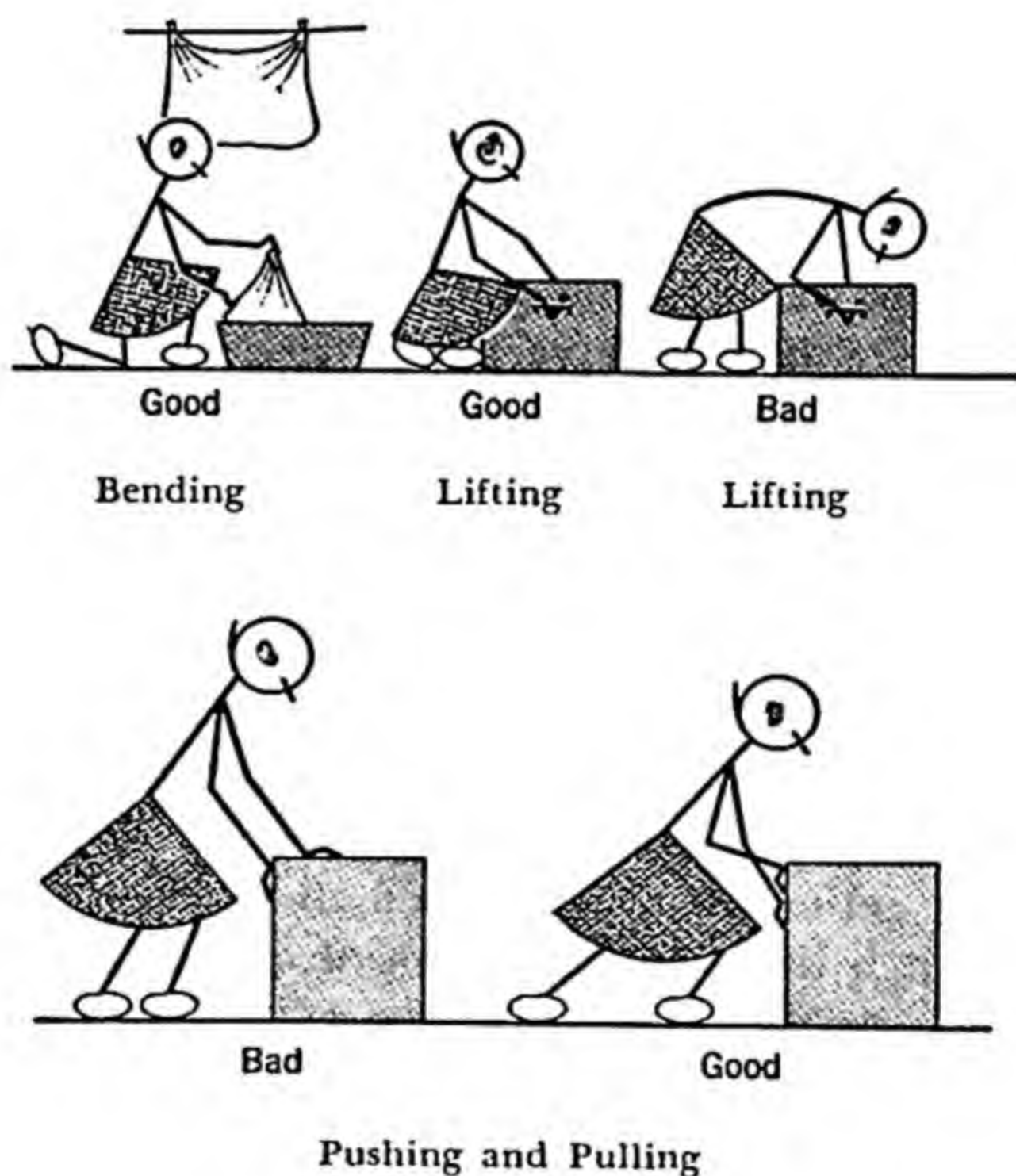
³⁴ Loraine Frost, *Posture and Body Mechanics*, State Univ. Iowa Bul. 580, 1944.

³⁵ Henry Eastman Bennett, *School Posture and Seating*, Boston: Ginn and Company, 1928, pp. 9-16.

182 • Management in Family Living

Using the most comfortable body position while working eases the body and relieves strain. Alternating standing and sitting is more restful than either one continued for a long period.

Doing a task the efficient way means saving both time and energy. Hazelton and Russell describe the efficient way as "the one that (1) uses only those muscles or parts of the body that are



necessary to the operation, and (2) uses those muscles or parts of the body which are best able to do the work."³⁶ For instance, in bending to do certain tasks, it is easier to put one foot slightly forward and bend through the knee and ankle joint. In lifting something heavy from the floor, such as a baby or a bag of groceries, it is better to bend the knees and thigh joints and use

³⁶ Helen W. Hazelton and Marion Russell, *Keeping Fit for Farm Work*, Purdue Univ. Bul. 299, 1943, p. 3.

the stronger leg muscles for the actual lifting. Pushing or pulling a large piece of furniture can be done with least strain by dropping into a partial crouch, knees limber, hips low, and pulling or pushing in that position. Carrying packages or other articles is easier when the load can rest against the hip. Balancing is done by bending toward the other side, which shifts the weight to the large bones and leg muscles.^{37, 38}

Changes in Working Arrangements and Equipment

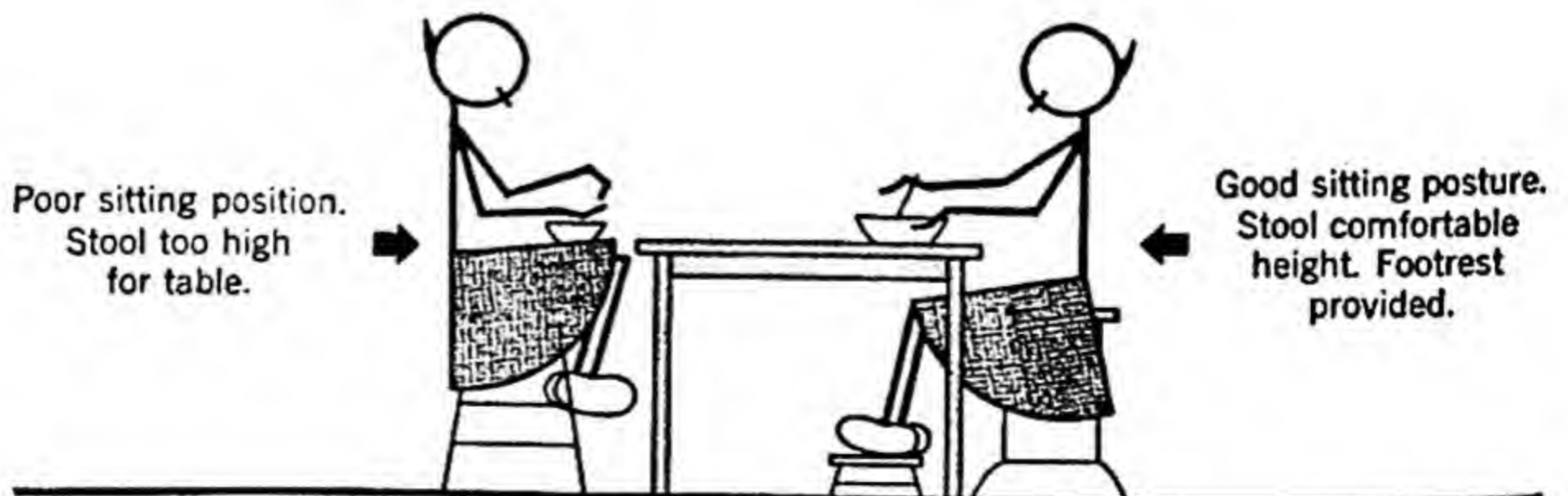
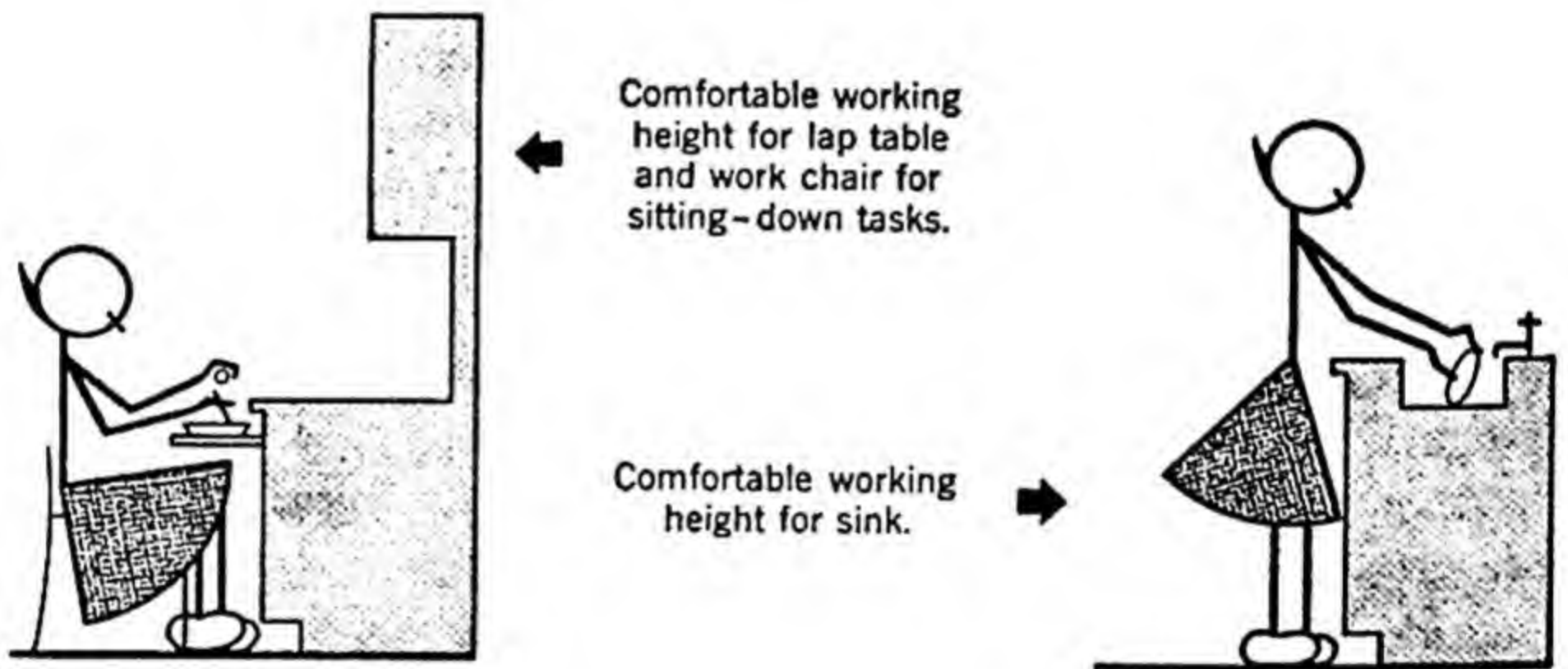
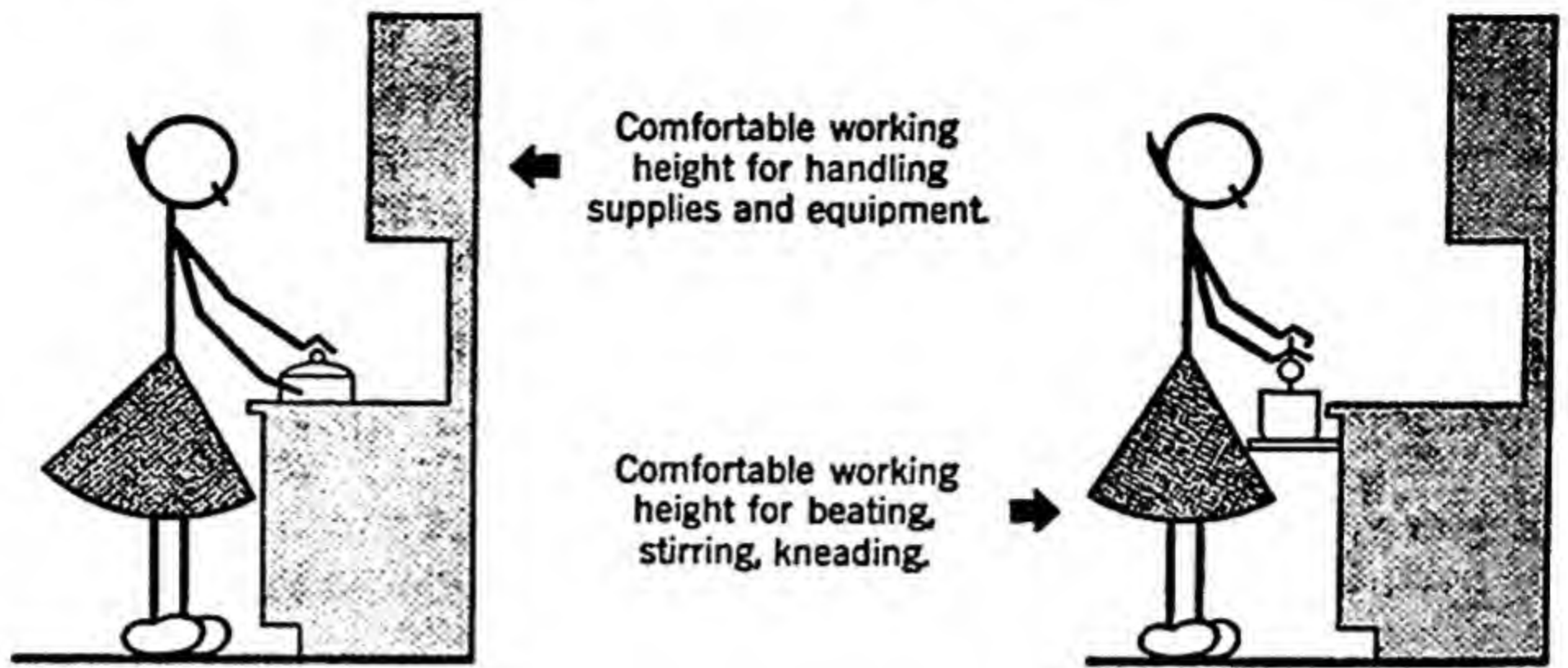
The inefficient arrangement of equipment, utensils, and materials and the lack of suitable tools cause needless waste of time and motions in the performance of many homemaking tasks. A study of present kitchen arrangement and equipment often suggests better arrangements or the securing of new equipment that will result not only in the saving of steps but also in better methods of work. Many changes can be made with small expenditure of money, and often with only the ingenuity of some family member. Some helpful questions to ask regarding changes of this kind are presented in the following pages.

Is the major equipment efficiently arranged? The possibilities of savings in time and steps through changes in both kitchen arrangement and equipment were shown by Muse (page 168). The improved arrangement released 45 percent of the homemaker's time and eliminated 91 percent of the steps. The other studies of arrangements of equipment in different-shaped kitchens indicate various ways of reducing travel distances in planning new kitchens, or in rearranging old ones.

Are work surfaces a comfortable height and width? The heights of kitchen work surfaces should be given careful attention because equipment of a comfortable height suited to the worker permits good working postures. (See pages 184, 185.) When the work surfaces in the kitchen are too low, a worker must stand in a stooped, uncomfortable position while working. If the surfaces are too high, the arms and shoulders must be

³⁷ Charlotte A. Beatty, "Housework Can Keep You Young," *The Kitchen Reporter*, published by Kelvinator Kitchen, March, 1953.

³⁸ Ethyl Grady, *Body Mechanics in Homemaking Tasks*, Univ. of Rhode Island, January, 1954.



Equipment suited to worker permits good working postures.



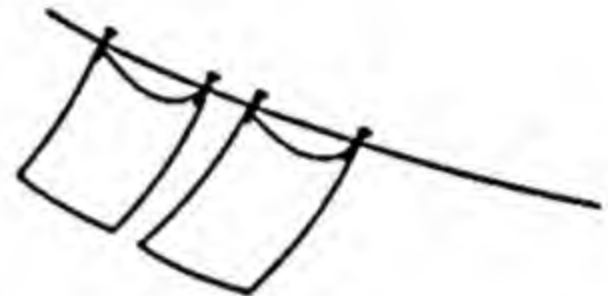
← Good sitting posture.
Stool with backrest
and footrest.

Dust mop handle of
comfortable length.



← Hanging clothes from
a basket on a utility
table or homemade
cart saves work.

Hanging clothes from
a basket on the floor
requires lifting
and bending.



← Comfortable working
height for sit-down
ironing board.

Ironing board of
comfortable height.



Equipment suited to worker permits good working postures.

raised to make the adjustment to the height. When the surfaces are too wide, it means stretching the arms and bending the body. Adjustments of this kind cause unnecessary strain and fatigue.

Good standing position is possible only when the height of the working equipment is built or adjusted to fit the physique of the worker. The most satisfactory method for the worker to determine the best work surface heights for herself is to test the different heights and find those at which tasks can be done most comfortably. To make this test Gilbreth states: "The worker should stand erect with arms comfortably relaxed from the shoulders and with the elbows bent. She will find the most comfortable working level one high enough to be used without stooping, but not high enough to cause her to raise the hands above the level of elbows."³⁹

Are work chairs and stools comfortable? A chair or stool of the proper height and type makes it possible for a worker to sit comfortably while doing tasks at the sink, work table, or lap-board, or when ironing clothes at a board or electric ironer. (See pages 184 and 185.)

To be comfortable a chair should induce a good sitting posture without physical strain. A comfortable work chair or stool has the following features:⁴⁰

The chair or stool should permit the worker to sit comfortably with both feet resting on the floor or a footrest.

The seat should be low enough so that there will be no pressure from its front edge on the area behind the knees. A seat that is too high tends to interfere with the nerves and blood vessels in this area, thereby causing discomfort and restlessness.

The seat should be shallow enough—14 to 15 inches—to permit the worker to sit back in the chair and bend the knees without any feeling of pressure under the knees. A shallow seat allows the worker to bend at the hips when leaning forward. A deep seat causes the worker to slump and bend at the waistline and drop the shoulders forward.

A seat should have a moderate backward slope to prevent the worker from sliding forward.

³⁹ Lillian Gilbreth, *The Kitchen Practical*, New York: Brooklyn Borough Gas Company, 1930.

⁴⁰ Bennett, *op. cit.*, pp. 49, 51-61.

A back rest should be provided to give support to the small of the back. A chair should not have a horizontal support or bar lower than 6 inches above the seat. The open space allows the worker to sit back in the seat so that the small of the back receives proper support.

Are the tools and equipment the most efficient that can be chosen? The purchasing of efficient working equipment for doing the household tasks and for the care of the family should be given careful thought, since this is one of the easiest methods to control time and energy expenditures.

The saving of 625 steps for each 8 pounds of line-dried clothes by the addition of an automatic dryer, and the reduction of 35 eight-hour working days a year by the use of an automatic dishwasher are illustrations of this point. (See page 166.) The use of the right tool for doing the work is also important.

Equipment which is technically inadequate, such as the egg beater that sticks, the paring knife that fails to hold an edge, the ironing board that is warped or that rocks, the mixing bowl that tips or is hard to clean, the stirring spoon that is poorly designed, or the oven that is too small, is not only wasteful of time and energy, but also causes nervous irritations resulting in fatigue.

Are small equipment and food supplies stored near the place they are to be used and within easy reach? Much needless walking, lifting, and rehandling can be eliminated by storing small equipment and food supplies at the work centers where they will be used. This means that skillets, griddles, and seasonings will be at the range, equipment used in dishwashing and in the preparation of vegetables, such as kettles, pans, and paring knives, at the sink, and bowls and food supplies at the food-mixing center.

The study by Muse (see page 168) shows that rearrangement of utensils and food supplies resulted in a saving of 10 minutes and 386 steps in the preparation of a dinner for five persons.

All tools, utensils, dishes, and food supplies should also be stored in such a way as to be readily accessible. This may be accomplished by adjustable shelving arrangements of one kind and another. Storage one row deep on shelves and one layer deep in drawers saves stacking and crowding. Definite and

convenient storage spaces enable the worker to do kitchen tasks with a time-saving sequence of movements and with the minimum conscious effort. Frequently used heavy utensils should be stored as nearly as possible at work surface level. This keeps the most used pieces of equipment within easy reach and reduces needless shoulder lifting.⁴¹

Are work surfaces well lighted? The lighting, both natural and artificial, of the working areas in the house is of particular interest, as glare from the sun or from electric lights causes discomfort, interference with vision, and eye fatigue. Inadequate light causes similar difficulties. Both conditions interfere with good vision, reduce one's working efficiency and pleasure in doing tasks, and frequently are the cause of accidents.

For serviceable kitchen lighting the light should be distributed generally about the room by a ceiling fixture. In addition to this, adequate light should be provided at the work areas: sink, range, counters, and dining table if there is one. There should be enough light to provide quick and easy seeing for the work to be done, and the right quality of light to avoid glare, excessive shadows, and to insure proper distribution.

Dining tables that are used for study and work centers need special lighting. More light is needed for study and sewing and mending than for dining, so a fixture that can be switched to three different levels is ideal.

Changes in the Production Sequence

Many tasks can be done with less effort by eliminating or combining certain processes or by changing the order of work. Writing down the way a task is being done will often show where unnecessary operations can be eliminated.

Scalding dishes in the drainer and allowing them to dry without wiping is an example of the elimination of one operation in this process. The use of a spray which can be attached to the hot water tap for rinsing dishes in the drainer requires fewer motions than rinsing dishes in a pan or under the tap.

Frequently, the elimination of a utensil in the preparation

⁴¹ Mary Koll Heiner and Helen McCullough, "A New Look at the Kitchen," *Architectural Forum*, Vol. 84 (1946), pp. 155-158, 187-190.

process will save motions. For instance, if pared potatoes are dropped directly into the dish in which they are to be cooked, or if apples are pared and sliced into the pie crust instead of another dish the time and effort required in handling extra utensils will be saved.

The new methods of combining all ingredients at once in making cakes and bread—the easy bowl-to-pan methods—are designed to eliminate a number of operations and utensils used in the longer preparation processes.

Kitchen jobs often lend themselves to grouping and combining. For instance, a cake or cookies can be baked while getting dinner; ironing and mending can be done while foods are cooking; baking dishes can be washed and put away as the meal is being prepared; and often baking, watching the children, and listening to the radio can be combined with the job of dish-washing.

Many tasks require a great deal of walking and frequent changes from one type of muscular work to another. When this is true, it usually saves time and effort to proceed with one operation until it is finished. For instance, in cleaning the house, the continuation of each of the processes of sweeping, dusting, and mopping the floor throughout the rooms on each floor is easier than cleaning each room separately. Moreover, this method of work saves the extra handling of tools and materials that is necessary when work is frequently changed. When changes are rapid, there is little time for the worker to make the necessary nervous and muscular adjustment to the new task—to get warmed up before it is necessary to go on to the next. As a result, rapidly changing work can never flow along as easily and smoothly as the tasks that are continued for some time.

The hospital method of making a bed completely on one side and then on the other with only one trip around the bed shows how steps and motions can be eliminated by changing to a more efficient method. When blankets, sheets, and spread are tucked in securely, daily bedmaking is reduced to smoothing out the sheets, plumping up the pillows, and pulling the blanket and spread back in place.

Finding the best order of work or the easiest method of doing

a task and putting it into practice saves both steps and motions. Also one learns to work in an orderly instead of a hit-or-miss fashion.

Changes in the Finished Product

Simplifying work by making changes in the finished product calls for an appraisal of available resources and the family's standards of housekeeping. Most families have certain desirable finished products in mind that they consider important. Many of these standards have passed from parents to sons and daughters, and often such traditional patterns are hard to change. Different standards, however, are more easily accepted if they are discussed by the family so that everyone understands why the change is being made. In this way, reluctance to accept new and simpler methods is overcome.

There are numerous examples of how work can be simplified by making changes in the finished product. Many homemakers use unironed sheets and towels, and place mats instead of tablecloths, in order to lighten the ironing load. Cooking potatoes in their jackets; baking cookies in sheets that can be quickly cut into squares or bars instead of making icebox, rolled, or drop cookies; making one-crust pies in place of two-crust ones; preparing one-dish meals occasionally; baking a loaf instead of a layer cake; and making a simple uncooked frosting instead of a cooked one are a few of the ways in which homemakers reduce time and motions in food preparation.

In planning the day's meals or the week's cleaning, a wise manager is constantly thinking of time and energy costs in relation to the finished products. She often adjusts standards when costs run too high.

Changes in Materials

In recent years technological advances have brought on the market many new materials designed to simplify work in the home. The use of new materials frequently means the acceptance of different standards, although this may not always be true. The advantages of many of these materials is that they bring an enormous reduction in time and energy.

For example, woven-grass or permanent-finish table mats and tablecloths can often take the place of linen cloths or placemats; paper towels, napkins, handkerchiefs, and draperies are used instead of linen and cotton ones. Aprons, bibs, and curtains made of plastic instead of cotton do away with much of the laundry work. Ironing can also be reduced by using more garments made of materials that require little or no ironing.

In many homes food preparation is made easier through the use of powdered coffee, frozen meats, fruits and vegetables, doughs and pastries, prepared mixes for muffins, cakes, pastry, breads, and candy.

Self-polishing waxes that are easily applied, quick-dissolving soap powders or synthetic detergents (syndets) for washing, chemically treated cloths for cleaning silver, and cleaners that wipe away dirt and grease from washable surfaces quickly and easily are some of the materials that make cleaning jobs easier. Many of the materials and fabrics now used for curtains and furniture and for floor and wall coverings and working surfaces cut down on daily care and cleaning.

Work Simplification Applied in the Home

The busy homemaker who wants to free more energy for certain activities, the employed homemaker who needs to lighten her home workload, and the disabled homemaker who must learn to conserve her energy can use the principles and techniques of work simplification to attain these goals.

The work simplification studies of homemaking tasks indicate that change and improvement in work methods are possible in every home. They also show that there is considerable variety in "best work methods" in different households. For example, similar homemaking tasks, such as dishwashing, are performed in every home, but the facilities and demands of individual homes, together with the skills and abilities of the members of the family in them, result in many different methods of doing these tasks. It is true that a number of "best ways" can be found for many of the jobs we do.

Finding the best method of doing homemaking tasks can easily

become a part of family living, one of the goals continually sought. Most men and children enjoy tackling problems of this kind. Furthermore, enlisting their interest may make many changes possible that could not otherwise be accomplished because of the expense involved. Motion-mindedness can set many wheels in operation and bring about many changes which will bring new satisfactions to both the homemaker and her family.

Work Simplification for Disabled Homemakers

New emphasis is being placed on work simplification in the home. Work-simplification programs are being sponsored in many states for disabled homemakers whose work capacity is limited. Through instruction in work-simplification techniques and the use of demonstration kitchens and equipment, many disabled homemakers are learning how to "take it easy" and still get their normal work done.

The Heart Kitchen planned by the New York Heart Association with the help of research workers, motion and time study engineers, home economists, architects, physical therapists, and physicians, and the energy-saving kitchen designed by the USDA housing specialists on the basis of research on energy costs and space needs are two fine examples of what is being done to help the disabled homemaker and her family. These plans are available to all who wish to have them.^{42, 43, 44, 45}

Kitchen Design for the Wheelchair Homemaker is the title of a project now in progress at the University of Illinois under the direction of Helen E. McCullough and her assistant, Mary B. Farnham. Thirty paraplegic women students and six local homemakers, who are confined to wheelchairs, are participating in this project.

This study aims to determine dimensional criteria useful to anyone concerned with housing for the handicapped. Recom-

⁴² *The Heart of the Home*, American Heart Association, New York City.

⁴³ *Beltsville Energy Saving Kitchen*, U. S. Dept. Agr., Agricultural Engineering Research Division, Plant Industry Station, Beltsville, Md. Leaflet No. 418, 1957.

⁴⁴ John G. Bielawski, M. D., "Giving the Body a Break in the Kitchen," *The Kitchen Reporter*, published by Kelvinator Kitchen, September, 1952.

⁴⁵ Mrs. Frances G. Sanderson, "Improving Work Habits of Cardiac Homemakers," *The Kitchen Reporter*, published by Kelvinator Kitchen, June, 1951.

mendations will be based on the results of measurements and tests conducted with a group of orthopedically handicapped men and women. Although all subjects for this research will work from wheelchairs, the recommendations will be useful for many types of disabilities. Primary emphasis will be on safety and ease of management in kitchen and work areas, but several measurements will apply to other parts of the home. Measurements include reaches, necessary clearances, comfortable working heights, and space requirements for maneuvering the wheelchair. The subjects will test a wide variety of appliances and storage units for ease of use and practicality.

Photographs will be taken, and a set of slides, a variety of floor plans, and working drawings for special storage units will be made available following the publication of research data. It is hoped that a demonstration kitchen, accessible to the public, will be constructed and placed on permanent exhibit at the University of Illinois.

Additional References

- Barnes, Ralph, *Motion and Time Study*, New York: John Wiley and Sons, Fourth Edition, 1958.
- Cades, Hazel Rawson, "It's Up to You to Make the Right Moves," *Woman's Home Companion* (January, 1957), pp. 90-91.
- Cowles, May L., Sara M. Steele, and Mary B. Kishler, "Savings in Distance Walked in Kitchens through Reorganization of Storage and Work Space," *Journal of Home Economics*, Vol. 50 (March, 1958), pp. 169-174.
- Denniston, Helen, and Margaret P. McCordic, *Make Your Work Easier*, Univ. Wisc. Agr. Ext. Ser. Circ. 365, 1945.
- Fitzsimmons, Cleo, *The Management of Family Resources*, San Francisco: W. H. Freeman and Company, 1950.
- Fitzsimmons, Cleo, E. Goble, and G. Monhaut, *Easier Ways*, Purdue University Extension Bul. 391, 1953.
- Gilbreth, Lillian M., *The Homemaker and Her Job*, New York: D. Appleton-Century Company, 1927.
- Gilbreth, Lillian M., Orpha Mae Thomas, and Eleanor Clymer, *Management in the Home*, New York: The Macmillan Company, 1955.
- Gilbreth, Lillian M., "Making the Ends Meet in a Thousand Ways," *Woman's Home Companion* (January, 1957), pp. 68-77.
- Gross, Irma H., and Elizabeth Walbert Crandall, *Management for Modern Families*, New York: Appleton-Century-Crofts, 1954, pp. 282-331.

194 • Management in Family Living

- Howard, Mildred S., Lenore Sater Thye, and Genevieve K. Tayloe, *The Beltsville Kitchen—Workroom with Energy-Saving Features*, U. S. Dept. Agr., Home and Garden Bulletin No. 60, 1958.
- Leopold, Clara N., "Work Simplification for Children," *The Kitchen Reporter*, published by Kelvinator Kitchen, March, 1953.
- Martzloff, Thomas H., "The Challenge of Work Simplification to Management," *Journal of Home Economics*, Vol. 46 (December, 1954), pp. 720-721.
- Metheny, Eleanor, *Body Dynamics*, New York: McGraw-Hill Book Company, 1952, pp. 151-190.
- Nadler, Gerald, *Work Simplification*, New York: McGraw-Hill Book Company, 1957.
- Roberts, Irene, "Practices and Attitudes of Homemakers in Cleaning the Living Room," Doctor's thesis, Cornell University. *Journal of Home Economics*, Vol. 49 (March, 1957), pp. 227-228.
- Wessel, Janet A., *Movement Fundamentals*, Englewood Cliffs, N. J.: Prentice-Hall, 1957.
- Wright, Russell, "Chart Your Way to Easier Living," *Better Homes and Gardens*, Vol. 31, No. 4 (April, 1953), pp. 57-62.

9

Homemaking Skills in Time and Energy Management

THE ACQUISITION OF SKILL in the performance of homemaking tasks eliminates many time- and energy-consuming motions in the day's work. Tasks are easily done and plans are executed with speed and smoothness by the skilled and experienced homemaker. Her motions are graceful and rhythmic, and they reflect the mental control back of the motions. The inexperienced homemaker works slowly and laboriously. Her motions are ungraceful and unrhythmic and show lack of confidence and control. She finds it difficult to carry out her plans according to schedule, and she is likely to be dissatisfied with her performance.

How are homemaking skills acquired? Why is it that Ann can make thinner rolled cookies than any of her friends? How does it happen that Mary can iron the collars of shirts so perfectly? How can Jane always prepare and serve such delicious meals? Why is it that Mother can turn off so much work with so little effort? What motivates these particular homemakers to acquire these skills?

Besides the fact that Ann takes pride in her standards of production, another reason why she makes such thin cookies is that she receives praise for her superior product and this adds to her sense of satisfaction and personal gratification. Mary may excel in ironing collars because of the satisfaction received

through the appreciation of her husband and sons and the complimentary remarks of friends.

9 Besides enjoying the preparation of food and the serving of meals, Jane gets much pleasure from the praise of her guests and family for her delicious food and beautiful table. She may also enjoy the friendly rivalry and competition with her friends at church suppers and club luncheons. Mother, who turns out so much work, may like the satisfaction which comes with the feeling of accomplishment.

13 When are homemaking skills learned? Many are acquired by observation and by supervised play in childhood. Hearing standards discussed, watching operations carried forward in the home, and sharing responsibilities familiarize one with patterns of action and give experience in doing things. Skill in certain tasks may be acquired in scout work, in 4-H club work, in secondary- and high-school classes, in vocational schools, and in certain college courses. Many skills, however, must be acquired by the homemaker in her own home. Although no studies have been made to determine the manner in which homemakers acquire manual skills, a fairly clear idea of this learning process may be obtained by examining studies that have been made on the learning of skilled motor performances.

Acquisition of Manual Skills

11 Experiments show that much of our learning is by trial and error combined with observation. When confronted with the learning of a new task, we are likely to proceed in a haphazard manner, trying first one way and then another, observing results, varying the procedure, and gradually finding a method of reaching the goal. By trial and error, combined with what has been learned by observation, one builds up a fund of knowledge and manipulative skills that enable him to attack new problems with some degree of foresight.¹ "Foresight depends on memory, for the outcome of an act cannot be foreseen except by one who

¹ Robert S. Woodworth, *Psychology*, New York: Henry Holt and Company, 1940, pp. 291-318.

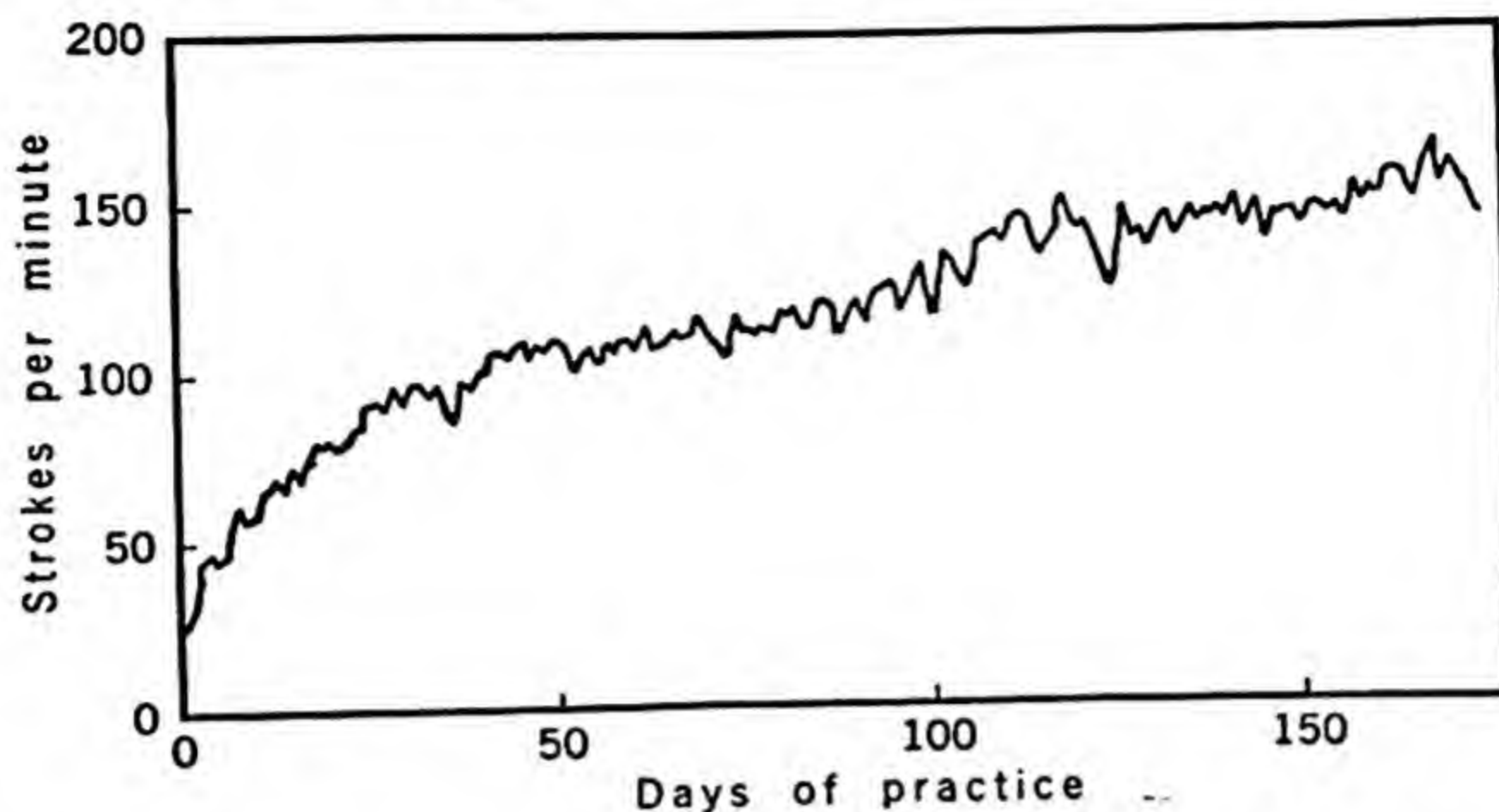


Figure 15. Learning curve of a young man in typewriting. (W. F. Book, *Psychology of Skill*, New York: Gregg Publishing Company, 1925, p. 18. Reproduced by permission.)

has had experience in performing similar acts and noting their results.”²

Though many of the simple tasks can be mastered in a few trials, there are many complex activities that are not so easily learned. Studies that have been made of the acquisition of skill in such a complex activity as typewriting throw considerable light on the manner in which different individuals acquire skill.

In a typewriting study the day's record of a student was kept during a period of 150 days of practice to determine how rapidly he could acquire proficiency in typewriting. His improvement is shown in Figure 15. During the early stages of practice the number of strokes per minute increased rapidly and then much more slowly, giving a typical learning curve. The curve rose rapidly at first and flattened out near the “physiological limit” of the student, the limit of what his nerves and muscles could actually perform. Such a flat section in a learning curve followed by a second rise is called a plateau.³

According to experimenters in this field, a number of factors

² *Ibid.*, p. 396.

³ W. L. Bryan and N. Harter, “Studies in the Physiology of the Telegraphic Language,” *Psychology Review*, Vol. 4 (1897), p. 49.

may affect the appearance of the plateau. Sometimes it is due to discouragement or carelessness, lack of attention and effort, lack of adequate motivation, lack of confidence, the complexity of the task, or the number of practice periods. Sometimes it may represent the true physiological limit of the individual performing the task, and the future rise to a higher level is then the result of improved methods.⁴

It was found that the student of typewriting acquires skill by improving his methods more than by increasing his speed. In typing, the first task is to learn the keyboard and where and with what finger to strike each separate letter. As soon as the sight of a letter calls up the proper letter-striking movements, the "letter-habit stage" has been reached. With further practice "word habits" are developed. At first the sequence of movements is controlled and directed by spelling out the word. In time, however, each familiar word comes to be written by a pattern of finger movements. As skill is developed, writing is done entirely by word and phrase patterns. With these larger patterns of finger movement, speed is increased and writing becomes continuous.^{5, 6}

How Mental Habits Help

In learning typewriting certain mental habits of control are formed in conjunction with the habits of manipulation. These habits enable the learners to handle more successfully the problems involved in the learning itself. The most important of these mental habits are: (1) learning the most economical method of acquiring habits of manipulation; (2) learning how to meet difficulties; (3) acquiring and maintaining a favorable attitude toward work; (4) learning to keep attention focused on the work at hand; and (5) learning to economize effort. The typewriting tests showed that a large part of the progress was due to the mental habits of control. It is no doubt true that mental habits play an important role in the development of all habits of manipulation.⁷

The typewriting study showed further that during the practice

⁴ Woodworth, *op. cit.*, p. 320.

⁵ Book, *op. cit.*, pp. 25-28.

⁶ Woodworth, *op. cit.*, p. 321.

⁷ Book, *op. cit.*, pp. 89-99.

period an economical or short-cut method of acquiring manipulation skills was developed which proved of value in the formation of all the special typewriting habits. All the habits of manipulation acquired in learning to type are developed in much the same way. At first everything must be done in the greatest detail and with the greatest effort. As practice progresses, details and processes which are no longer needed are gradually dropped until a single direct movement is evolved. This short-cut method results in a saving of both time and energy and in skilled, graceful movements.

One learns how to meet difficulties by mastering each one as it arises. Analyzing the problem, picking out the special difficulties, and attending to each until it disappears seems to be the best procedure.

The acquiring and maintaining of a favorable attitude toward typewriting take considerable time. At first the learners tested felt a keen interest in the work and enjoyed doing it, but as practice continued the interest waned and the work seemed boring. As soon as greater skill was developed, however, the unfavorable attitude disappeared and new interest and pleasure were taken in the work.

The development of a habit of attention is closely associated with the development of a favorable attitude toward work. In the early stages of the typewriting practice period it was difficult for the learner to keep his attention focused on the work, but by the time expert skill was attained the habit of attention had been formed. The development of habits of attention is extremely important if the less economical ways of typing are to be discarded for new and better ways. Only in moments of intense interest and close attention does the learner progress from the lower to the higher levels of skill.

Economy in the use of effort is important, since much effort can be wasted in meaningless and unnecessary movements. As greater skill is acquired, this difficulty is gradually overcome.

Effort Used in Acquiring Skills

Anyone performing a new task uses considerable effort to overcome the difficulties experienced in doing an unfamiliar task.

When the individual has passed the exploratory stage of learning, he begins to speed up. He pounds the keys on the typewriter if he is learning to type; swings the broom if he is learning to sweep; uses vigorous motions if he is learning to dry the dishes; twists up his face and tenses the muscles of his arm if he is learning to slice bread or cut cloth; and in other ways shows the extra effort he is making. As he develops skill he uses less and less effort in performing the task.

Woodworth states that during the period when skill is being acquired the individual passes through three stages of learning:

1. The exploratory stage.
2. The awkward and effortful stage.
3. The skilled and free-running stage.⁸

Homemaking Skills

In acquiring skill in homemaking activities, the homemaker passes through the same stages of learning and effort that were experienced by the learner of typewriting. For instance, in learning to peel an apple, she must first learn how to hold the apple and paring knife and how to turn the apple and manipulate the paring knife in removing the skin. Naturally the first motions are slow and jerky, and only a small amount of skin is removed at a time. The peelings are thick and uneven, and large portions of skin are left on the apple, which must be peeled off later. The learning of these different patterns of finger movements is similar to the development of "letter habits" in typewriting.

During the second stage greater effort is used, better control is gained, motions are smoother and the peelings thinner, more even, and longer. By sharpening the knife, speed may be increased and results improved. This stage corresponds to the "word-habit stage" in typewriting.

In the third stage greater skill is acquired and the peeling is done easily, quickly, and smoothly. The surface of the apple is free of skin and the peelings thin and in long strips. The skill acquired at this period is similar to the "word-and-phrase stage" of typewriting.

⁸ Woodworth, *op. cit.*, p. 384.

The smoothness and speed developed in this third stage suggest a "learned motor sequence" similar to that developed in typing. The complex combinations of movements of both hands working together appear to move along almost automatically once the paring of the apple is started. "All these motor patterns may depend on observation in the first instance, but continued use seems to integrate them so closely in the nervous system that they get along with only a minimum of observational control." ⁹

Acquiring skill in a more complex activity is illustrated in the making of an apple pie, which involves many separate acts of skill. The main acts are:

Lighting the gas in the oven if gas is used, or turning on the current if electricity is used.

Peeling and slicing apples.

Measuring ingredients.

Mixing the pastry—cutting in shortening, adding water.

Rolling half the pastry.

Lining pan with pastry.

Filling crust with apples and the correct amount of sugar.

Rolling upper crust of pie.

Folding and making slits to permit escape of steam.

Moistening edges of lower crust with cold water.

Placing folded upper crust on filled lower one, opening out folded half after it is placed on pie.

Pressing edges together.

Trimming off surplus pastry and pressing edges again.

Using other devices to prevent juices from running over and burning.

Use of oven regulator.

All these acts must first be learned as units, but the operations must be synchronized or performed coordinately and with care to produce a perfect product. Learning each act of skill corresponds to the development of the letter habits in type-writing. When these skills are combined into the larger activity, skills similar to the word and phrase habits are gradually developed.

⁹ *Ibid.*, p. 325.

A close study of the operations used in making the pie will no doubt show that many unnecessary or waste motions have been incorporated in the acts performed. Every effort should be made to eliminate all waste motions at the very start before wrong habits of work are formed. For example, having all the tools and materials to be used in front of one on the work table will save having to wash the pastry off the fingers before going to the cupboard to get the pie plate. A comparison of the number of superfluous movements made by a novice and an expert at pie-making would be very revealing. Planned actions prevent the loss of time and confusion in the performance of all homemaking tasks.

Acquiring skill in a still more complex activity is illustrated in meal preparation. During the first stage some degree of skill must be developed in the preparation of the different foods. This cannot be done all at once or even in a short time. As soon as some skill has been acquired the "food-preparation-habit stage" has been reached. This stage corresponds to the "letter-habit stage" in typewriting.

With further practice different foods may be combined into a simple meal. Timing the preparation of each food so that the whole meal is ready to serve at one time is a difficult skill to master. At times some foods may be overcooked, others undercooked. The mental habits of control developed during this learning process are extremely important. As soon as the homemaker develops skill in combining the small patterns of action into a larger pattern of action, the "meal-habit stage," which is similar to the "word-and-phrase stage" of typing, is reached.

As practice continues and as greater skill is gained, the preparation of all the food to be served in a meal flows along simultaneously, smoothly, and easily. Instead of thinking of only simple combinations of foods for meals, the homemaker learns to think of many new and different combinations. As time goes on she thinks not only in terms of meals, but also in terms of the day's meals, or even meals for a longer period.

In this complex activity the mental habits of control and the managerial skills of planning and coordinating the various ac-

tivities make it possible for the homemaker to develop gradually the numerous manual skills that are necessary.

The skills needed in homemaking today are rapidly changing. Many activities are now being handled by automation. The thermostatic controls in furnaces, in ovens, in surface units, and in other equipment have eliminated many activities entirely. Automatic washers and dryers now carry through a series of activities without any physical or mental help on the part of the homemaker. One of the problems today is developing the necessary techniques and skills required to use this new equipment easily and effectively.^{10,11}

Transference of Skill

The preceding discussion shows that practice brings improvement in the performance of all tasks that must be done. But does the practice that one gets in doing one task give skill that can be carried over to other tasks?

The investigations that have been made on the transfer of memory skills indicate that "the skill transferred consists partly in the habit of looking for groupings and relationships, and partly in the confidence in one's own ability."¹² Concerning the transfer of manipulation skills, Woodworth says, "In using any given tools and materials, the learner adjusts himself to the specific character of his particular job and is very likely not to discern any general principles that can be carried over to other jobs. Fortunately, however, it has been found that suitable instruction in principles of good management of such work, with a moderate amount of practice devoted to applying the principles, does build up a body of transferable ability."¹³

In answering the question, To what extent does learning transfer from one situation to another? Boring, Langfeld, and Weld state that, "In a common-sense way we know that old learning is useful in new situations. A man who has learned to drive

¹⁰ Irma H. Gross, "Automation and the Family," *Journal of Home Economics*, Vol. 49 (April, 1957), pp. 259-262.

¹¹ Elizabeth Walbert Crandall, "Learning to Live With Your Equipment," *The Kitchen Reporter*, published by Kelvinator Kitchen, December, 1953.

¹² Woodworth, *op. cit.*, p. 362.

¹³ *Ibid.*, p. 362.

one car can drive a similar car almost as well without additional practice. That is what we call *positive transfer*. On the other hand, previous learning often interferes with new learning. If, for example, a man learns to type with a special kind of keyboard, he has a much more difficult time learning to use a standard keyboard than if he had started with the standard one in the first place. It is for this same reason that initial learning with the 'hunt-and-peck' method of typing may make it actually harder to learn with the touch system. When learning one task makes learning a second task harder, we speak of *negative transfer*."¹⁴

Guiding Rules in the Acquisition of Skills

The previous discussion shows that there are certain practical rules that may be applied by everyone who is trying to acquire skill in daily tasks and recreational activities. They may be listed as follows:

1. Stress the correct performance from the start. Follow the correct patterns if at all possible.
2. Concentrate on the actual task. Interest and absorption in the activity are necessary.
3. Learn in natural units, not piecemeal. Work for a smooth integration of motions.
4. Space the learning trials. Determine for the skill you are learning the period which is short enough to avoid fatigue, boredom, and interference effects, but long enough to avoid wasting time in getting warmed up.
5. Overlearn; do not count on barely learning the task. For a performance to be skilled it must be a smooth flawless coordination of responses.¹⁵

Additional References

- Anderson, John E., *The Psychology of Development and Personal Adjustment*, New York: Henry Holt and Company, 1949, Chapter 5.
 Barnard, Harold W., *Toward Better Personal Adjustment*, New York: McGraw-Hill Book Company, 1951.

¹⁴ Edwin G. Boring, Herbert S. Langfeld, and Harry P. Weld, *Foundations of Psychology*, New York: John Wiley and Sons, 1948, p. 177.

¹⁵ *Ibid.*, pp. 163-165.

- Becker, Howard, and Reuben Hill, *Family, Marriage and Parenthood*, Boston: D. C. Heath and Company, 1955, Chapter 18, pp. 551-553.
- Blackburn, J. M., *The Acquisition of Skill. An Analysis of Learning Curves*, Great Britain Industrial Health Research Board, London: H. M. Stationery Office, 1936.
- Cox, J. W., "Some Experiments on Formal Training in the Acquisition of Skill," *British Journal of Psychology*, Vol. 24 (1933), pp. 67-87.
- Gilbreth, Lillian M., *The Homemaker and Her Job*, New York: D. Appleton-Century Company, 1927.
- Hartson, L. D., "Analysis of Skilled Movements," *Personnel Journal*, Vol. 11, No. 1 (June, 1932), pp. 28-43.
- Lange, Phil C., "What We Know Today About How People Learn," *Journal of Home Economics*, Vol. 45 (December, 1953), pp. 705-707.
- McGeoch, John A., *The Psychology of Human Learning*, New York: Longmans, Green and Company, 1942, Chapters 2 and 10.
- Pear, Tom Hatherly, *Skill in Work and Play*, London: Methuen and Company, Ltd., 1924.
- Poffenberger, A. T., *Principles of Applied Psychology*, New York: D. Appleton-Century Company, 1942, Chapter 4.
- Ryan, Thomas Arthur, *Work and Effort*, New York: Ronald Press Company, 1947, Chapter 13.
- Tiffin, Joseph, *Industrial Psychology*, Englewood Cliffs, N. J.: Prentice-Hall, 1947, pp. 183-187.
- Wirt, S. E., and H. H. Leedke, "Skilled Eyes Prevent Accidents," *Annual News Letter, National Safety Council*, Industrial Nursing Section (November, 1945), pp. 10-12.

PART 3 *Family Finance
Management*

10

Managing Family Income

FAMILY INCOME IS THAT STREAM of money, goods, services, and satisfactions that come under the control of the family to be used by them to satisfy needs and desires and to discharge obligations. As streams of water may be caught behind a dam and sent on through dynamos to generate power, so may this stream of income be controlled and directed to creative ends in a family's living.

✓ Chief among a family's concerns is the use of its major resource, money income. Much thought and effort are expended upon its size, its source, and the circumstances around which it is derived. Income conditions family living through the food, clothing, and shelter standards it allows and the comfort and satisfactions derived from its use.

What Is Income Management?

Income management may be defined as planning, controlling, and evaluating the use of all types of income. Its purpose is simply to get the greatest satisfactions from the resources at hand. Included in such satisfactions are three to be especially remembered: the development of the various individuals in the family, the furthering of group happiness, and the opportunity to contribute to civic well-being.

The *process* of income management is the *same for the family as for an individual*. There is a difference, however, in ultimate goals; the individual's goals are usually more or less personal,

whereas those of the family involve both the individuals of the group and the group as a whole.

To be thoroughly workable and satisfactory, any plan of using income must be worked out by, or at least for, the person or group concerned.¹ Anyone who expects to accomplish his goals by having someone else direct the plan or by following some ready-made plan is bound to meet with disappointment, and the same is true of a family. Patterns of expenditure that "fit" a family do not exist. Plans must be evolved by an appraisal of income and by careful analysis of each phase of an essential need in order to bring the two together and to arrive at a satisfactory plan.

The force and speed of social and economic changes in present-day economy leave no place for rigid patterns or models of expenditures. No two families, even though they have identical incomes, will have identical needs and desires. An "ideal budget for a family of four," "a model budget for a professional woman," and other such ready-made plans have been the cause of misdirected effort; they have been looked upon as easy solutions to personal financial problems, whereas nothing can substitute for thinking and planning by the individual or family group.

The information reported by standards-of-living and levels-of-consumption studies is invaluable in social planning and in providing basic information about consumption habits. Such data do not provide a *method* by which individuals can learn to manage their own incomes; the studies merely show how money is used. The fact that certain individuals do, as a group, spend their money in a certain average way does not mean that each individual in the group has such a spending pattern, nor is there any reason to assume that any particular degree of wisdom attaches to the pattern. For the individual family, working day by day and year by year to meet its own peculiar situations or problems, the information in such studies can be only suggestive at best.

Studies that have run through several years² are more helpful

¹ Esther E. Prevey, "Developing Good Habits in the Use of Money," *Journal of Home Economics*, Vol. 38 (February, 1946), pp. 79-81.

² Ruth C. Freeman, *Spending and Saving Patterns of Illinois Farm Families from 1933 to 1950*, Univ. of Ill. Agr. Exp. Sta. Bul. 592, Urbana, Ill., September, 1955.

in showing how families have made adjustments to changes in income or other situations. These studies seldom have to do with plans that have been evolved through weighing of human values. They are rather a record of the results of spending in a certain way through a period of years; they show the effect of changed needs of families upon the way money is spent, and also the changes in the cost of living through the years.

The amount of money income above the minimum for subsistence is not the entire basis for family accomplishment. Look around you and you will see families with ample money income accomplishing much less in terms of development of individuals and civic contribution than others with considerably less income.³ Misuse or poor use of family funds may be due to failure to realize or the willful ignoring of the place management takes in modern family living. Ingenuity, foresight, intelligence, and the stamina to carry through well-conceived plans for financing a person or a family pay high dividends in accomplishment and satisfactions.

Steps in Income Management

Six steps in income management can become guides in planning for the use of income. They are to—

1. Clearly define and recognize one's goals.
2. Analyze all kinds of available income.
3. Analyze money income for short and long periods of time.
4. Recognize the stages of the family and forecast desirable accomplishments during the various stages.
5. Synchronize the plans for the shorter periods with the plans for the longer periods.
6. Choose a method of handling money that will satisfy all members of the family.

Recognition of Goals

The first step to improvement in income management—an awareness of goals—is really a part of the initial phase in build-

³ Benjamin R. Andrews, "Every Family Should Plan," *Journal of Home Economics*, Vol. 39 (December, 1947), pp. 617-619.

ing family life. The importance of objectives as a part of management in family living has been discussed in Chapters 1 and 2. If a family ignores its guiding philosophy of life, income planning becomes an end in itself instead of a process based upon the family's needs and short- and long-time goals.

Perhaps a family is satisfied to have no particular goals and to drift and take what comes. If so, the finance management of the family will also drift, for usually the approach to any important part of living seems to pervade the general philosophy of living. Or maybe the family prefers to meet life's problems "head up." If this is true it will look to the training of its members, it will prepare them to make adjustments as demands arise, and it will train for self-sufficiency and independent action. Parents will study the particular abilities of family members and will establish their own form of finance management. They will plan and control family funds, for a high quality of living cannot be attained without intelligent use of *all* resources.

The importance of an individual or a group analyzing his or their needs and desires in order to lay a foundation for the use of income cannot be overemphasized. A study of all available information is useful in such an analysis. Books and pamphlets on income management, expenditure studies, guide budgets, and any data which help one clarify his needs give valuable assistance.

This first step in income management, and one which spells progress in its improved use, requires an objective, unemotional, and mature facing of daily finance problems. Daily needs should be financed in the light of long-time needs. The current life insurance premium for an educational fund for the children, for example, becomes one of today's needs since parts of the costs to meet long-time goals are always present to condition the use of current income.

Analysis of Kinds of Income

The second step in income management is to recognize and analyze all resources available. Among them are three types of income which make up the family's realized income, namely, *money income*, *real income*, and *psychic income*.⁴

⁴ "Real" and "psychic" income are referred to by some as "nonmoney" income.

In the family's economy *money income* is the purchasing power in dollars and cents that goes into the family treasury in a given period of time. It may accrue to the family in the form of wages, salary, sick benefits, dividends and interest, net rent, gifts, pensions, or royalties. Money income is converted into goods and services required for daily living, and often a part is diverted into a savings fund for delayed use or for investment purposes.

For the salaried group with regular employment the money income is usually predictable. Recognition of human resources which determine and condition the amount of real income may not be so easily discerned. For those who have irregular money incomes, or those with a large part of their income in the form of real income and little money, planning is not only more difficult but also more necessary.

Real income (nonmoney) is the flow of goods and services used or available for any given period of time. Real income is derived from the use made of money income, together with that added without the use of money but as a result of the efforts of family or household members; it includes the services derived from owned property and possessions used by family members in their daily living. Specifically, it includes such things as food furnished by a garden, the use of the house, the automobile, and all other equipment and durable goods. At this point management will be seen to be associated with real income, since the usefulness of certain items will depend upon the use made of them as well as their kind, quality, and amount. If a washing machine is not used efficiently, or if part of the house is closed off, the potential service of these items will not be fully realized.

Another important part of real income is the knowledge contributed and services rendered by members of the family, especially the homemaker. Valuable also is the ability of members to use their dollars (their money income) to good advantage. Few realize the economic worth of such knowledge: for instance, how and when and where to buy advantageously; how to plan for and control the use of money; how to care for and use all types of goods in order to conserve the utility each can give. The knowledge of how to buy household linens, for instance, to get the

best buy for the dollars spent, and to follow up the purchase with the knowledge of how to care for the articles in order to obtain long wear from them constitutes a significant part of the family's real income. With such knowledge and ability, considerable amounts of money can be saved for use for other pressing needs. Any family can develop talents of this kind if the members so will, and can thereby materially increase its realized income.))

Families are often unaware of the vital part played by these services in attaining goals for individuals and for the family group. This is where the *quality of management* is revealed in the home, both the management contributed by the homemaker and that contributed by husband, wife, and children jointly.

The community provides yet another form of real income for family use through its public schools, libraries, radio programs, parks, fire protection, etc. The family that makes use of these facilities—and only as it does use them—can increase realized income markedly without an expenditure of money.

The potential quantity of real income available for any family is impressive. The way families make use of all forms of real income, thus materially increasing the sum total of realized income, is dependent primarily upon the managerial ability of the homemakers and the magnitude and drive of their philosophy and goals in living.,

Wherever goods form a part of family living, the worth of the family's real income can be determined only with considerable care. The farm family, for instance, can show its true value of living⁶ only if it takes into account the goods furnished by the farm for family use. Although it is not hard to estimate the money value of such goods as food or fuel, the worth of services rendered the family by its members is more difficult to compute; yet such services play an important role in increasing the total value of the family's living.))

Psychic income is that flow of satisfactions that arises out of our everyday experiences, derived largely from the use of money and real income and making for psychic and physical well-being.

⁶ *Value of Living* as used here means money value of goods and services plus cash available for family living.

It is intangible and subjective, but the most important income of all in terms of quality of living.

Although the amount of money income for most families is based mainly on the earning capacity of its members, the quantity of real and psychic income depends largely on the skill that is exercised in management in everyday living.

Decision as to the manner in which income shall be used to satisfy the family's needs, desires, and responsibilities—collectively and individually—becomes a major family function. Income management is a family responsibility which can cause considerable tension and much worry and resultant unhappiness. On the other hand, satisfaction and accomplishment for each member of the family can be realized throughout life if income is managed with thoughtful patience, justice, and understanding of needs.

Thus, while we see that the *quality of income management* affects individual and family achievement, it is hard to make a fair appraisal of it in terms of dollars and cents. Nevertheless the abilities of both homemakers to use all available income wisely should be recognized as part of the family's value of living, for it is real income as truly as are home-canned foods or home-made soap. Since it is difficult to place a money value upon services of family members, this type of real income is usually overlooked or underestimated.

Income flows into the family's control as long as the family exists, but for purposes of analysis and planning, the complete cycle may be broken up into shorter or longer periods marked by days, weeks, months, or years. A period also may be based on the various stages in the life cycle of the family, such as the early school age of the children, the college period of the children, or the retirement of the father from business.

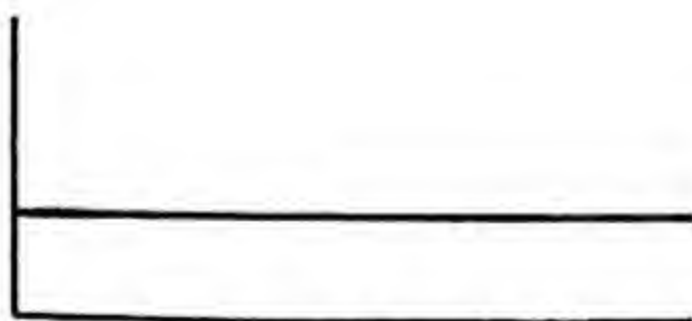
Analysis of Money Income for Short and Long Periods

The third step in income management is the analysis of money income for short and long periods. Money is usually earned by weeks, months, or years, and it flows in for a lifetime. Recognition that the sum of the short-time flow makes up the long-time stream is essential if maximum value is to be realized for

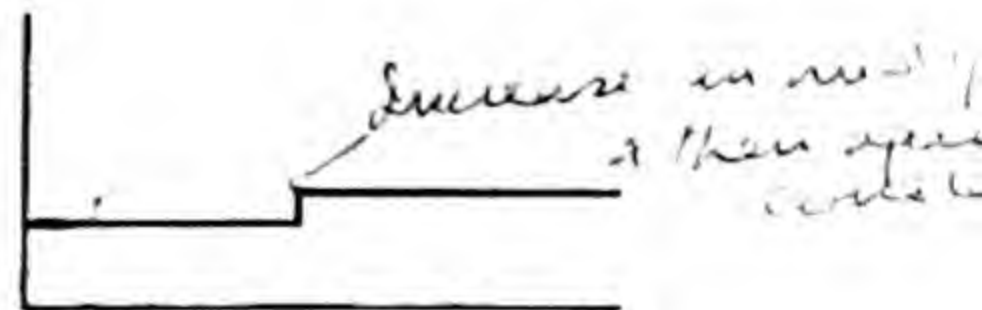
family living. The process of fitting or dovetailing the use of the short-time income, year by year, into the long-time picture in order to make the long-time stream meet predictable needs is the real essence of this third step.

Immediate wants are insistent. Individuals seem unable to withstand this insistency in order to have funds available for later wants, even though they are known. The ability to foresee future needs based on a knowledge of how the family will develop in the future, and to arrange to have funds to meet the needs, is the planned approach to financing family living. In order to show how an analysis of the short-period money income can be useful in planning family expenditures, the profiles of money incomes typical of several occupational groups are here presented. Such a picturization helps visualize the flow of the income for the year, showing where points of high or low supply can be anticipated. If this is paralleled with a review of possible current and future expenses, savings, and taxes to be paid, a clearer understanding of financing the family will result.

The line in Profile 1 represents a regular income from wages or salary that is constant throughout a year. Because it is perfectly predictable, this kind of income is the simplest to plan for and control.



Annual Profile 1. Money income constant throughout the year.



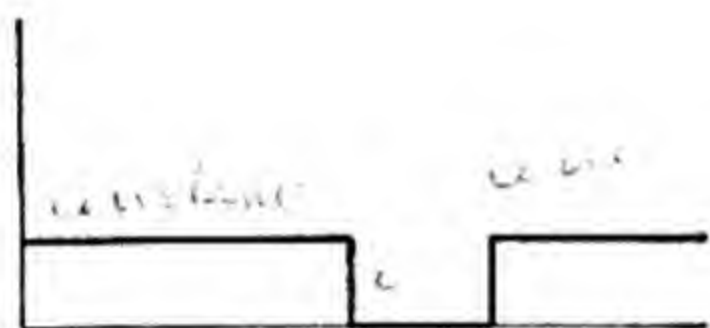
Annual Profile 2. Money income increased during the year.

for wages & salary earners. Predictable flow of income

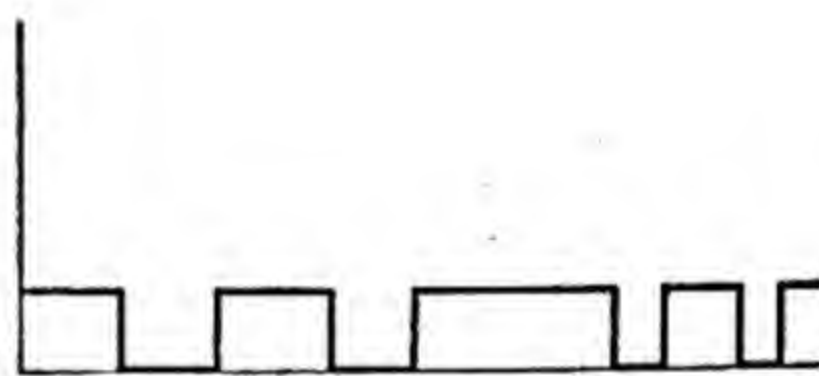
The line in Profile 2 pictures an increase at one point that carries throughout the rest of the year. The next year, unless another increase is forthcoming, the stream would return to the profile represented in 1. A cut in salary would be represented by a drop in the profile line, which would require adjustments

in expenditure plans. The flow of income would still remain predictable, however; and planning and controlling its use would be simple. The income streams of secretaries and clerks or any other regular wage earners would resemble this chart.

In Profile 3, the line represents a constant wage or salary for part of the year and none for the rest of the year. Teachers, as a group, have this type of income. Sometimes, however, even when employment is not continuous, the income is paid in 12 monthly installments, which means that the income flow is like that in Profile 1. Having the income spread evenly over the entire 12 months facilitates planning for its use. With a regular income being assured month by month, future planning can be concentrated on long-time demands and on how to integrate them into the year's expenditures.



Annual Profile 3. No money income during part of year. *teacher's job*
income spread over year



Annual Profile 4. No money income at several intervals during year. *income at intervals - fruit pickers etc.*

Profile 4 resembles Profile 3 in that there are periods when there is no income, but differs from it in that the times of unemployment do not usually appear so regularly. Seasonal workers, such as fruit pickers or wheat harvesters, those who have chance employment, or those who may be laid off at unstated intervals have incomes that flow in this manner.

Such irregularity of income may present no serious problem of management when the salary or wage during the periods of employment is large enough to carry the individual or the family comfortably through the periods of unemployment. If, however, the income is very small during the employed periods, grave problems can arise. These families have a great need to use carefully the income they have, yet they have the least oppor-

tunity to do so and, on the whole, the least inclination.⁶ It is vastly easier to use the money as it comes in and merely hope that somehow the future will be provided for than it is to try to make plans in the face of so much uncertainty. Many families whose total yearly income would spell comfort, if carefully managed, refuse to become interested in making intelligent plans, or any plans at all for that matter that would take them smoothly through the ups and downs of an irregular income.

Profile 5 pictures the income of the professional man or businessman who is not on a salary, or who is on a salary plus commissions, or on a salary that is augmented by earnings from investments. When a family has an income that flows in this manner, a definite "salary" is often declared for family use, and the fluctuating amounts above the family salary are put into investments or used to make up the "family salary" for months when

Annual Profile 5. Irregular money income of many professional men and women.



Salary + commission or no set salary, private practice

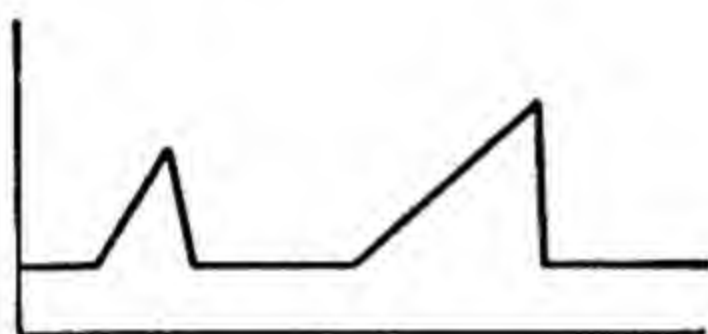
the income is low. The minimum monthly earning is relatively predictable, and the family salary may be quite positively so, if high-month returns are used to equalize low-month earnings and if the family does not live up to its income each month and from year to year.

This group shows a rather high degree of resistance⁷ to planning the use of income because of established "living up" habits. The individuals in the group who start family life on a planned economy find it easier to spread the use of their income than those who attempt to change their way of living after having become accustomed to using all the income as it comes in.

⁶ Maxine Watson, *Some Problems of the Low-Income Homemaker and Her Awareness of These Problems*, unpublished master's thesis, Iowa State College, 1943, pp. 69-72 and 88-89.

⁷ Helen Eastvold, *Finance Management of a Selected Group of Iowa State College Graduates*, unpublished master's thesis, Iowa State College, 1948.

Profile 6 represents an income with two major peaks, although there might be more than two. The income of the farm family derived mainly from sale of stock in spring and grain in fall is an example of such a stream. The profile shows an income base line throughout the year which includes the money value of real income obtained from the farm and used by the family plus added cash income from sale of produce from week to week. Although this profile represents a usual farm income, there are farm incomes that would fit one or another of the profiles in the series.



Annual Profile 6. Rather typical of money income on farms.

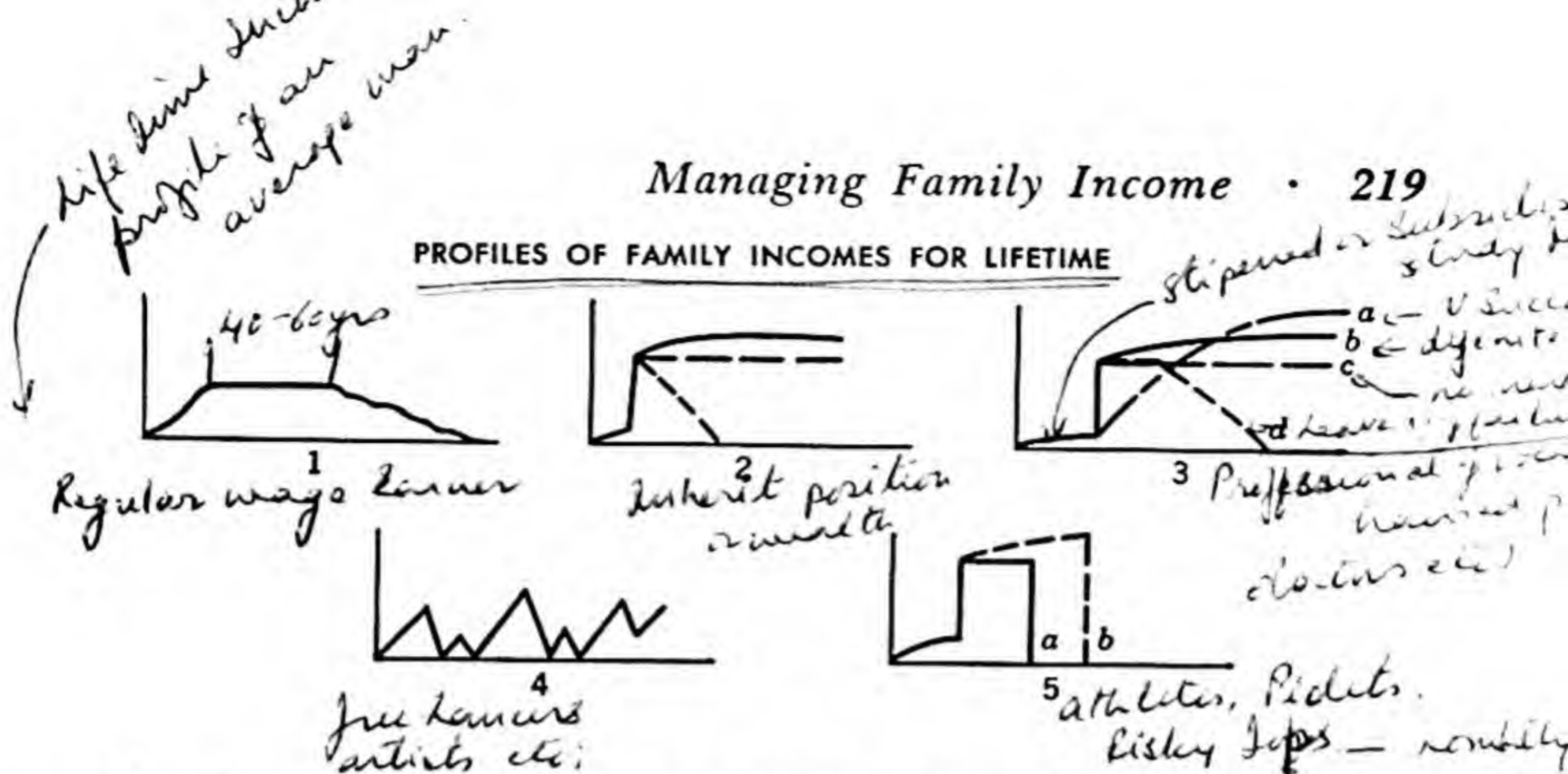


Annual Profile 7. One brief period of money income during the year.

Profile 7 shows the probable income pattern of such groups as artists, writers, inventors, promoters, or free-lancers who may have one or a few sales a year but no regular base as in Profile 6. There is one single point of productivity when a sum large enough to carry the family for the whole year comes into the family treasury, although the profile might include one or more lesser peaks.

Examining the characteristics of one's annual income makes possible the visualizing of monthly adjustments to fit peak-load expenditure months. Few persons or families are fortunate enough to have monthly expenditure demands that parallel monthly income exactly. Months with overloads are inevitable, yet they need not be the cause of either family tensions or of insolvency. Planning to have funds available to meet the peak loads requires thought and an attitude of mind favorable to living within one's income. The financial difficulties of many families indicate that people find it hard to face facts; on the

PROFILES OF FAMILY INCOMES FOR LIFETIME



other hand, there are many who do not know what facts to face in order to get along comfortably.

Attempting to visualize the probable direction of the stream of money income for a lifetime should go right along with the look at the short-time flow. The analysis will have more meaning if several profiles of *lifetime* incomes are examined in the same way as for annual streams.

One type of lifetime income stream is that of the average regularly employed wage earner; it rather faithfully follows his earning capacity. Lifetime Profile 1 pictures such an income stream. It can start in childhood, gradually increasing through youth to a plateau in the prime of life (40 to 60 years), and finally tapering off in old age. A large part of the population will be found to have income streams which follow somewhat this pattern. The term "average" is used here in the true meaning of the word; for there are individuals with higher earning capacity and thus higher incomes and others with lower incomes, yet the general direction of the curve will not differ a great deal. Even though this group includes a large part of the population there are a number of important variations that are typical of large occupational groups.

The second type of lifetime money income stream is that of the individuals who inherit position or wealth, or both, and receive an early money income from this accumulated fund. Lifetime Profile 2 shows the direction of the income in this group. The individuals here are likely to have a high income immediately. At least it is higher than for the average but it may not

follow closely the earning power of the person. Where one has inherited wealth or a position that carries an income, the direction that income will take for the rest of his life will depend upon his ability to husband what he has or to be a productive person in his own right. The amount of the inheritance is not a factor in this analysis; large or small, the direction the income takes is the same.

Still a third occupational group among us has a lifetime income stream represented by Profile 3. The professional or vocationally trained person with a longer period of training before earning from his profession or trade makes up this group. During the training period, the individual may be subsidized by parents, relatives, friends, or the government, or he may earn a small stipend, or he may borrow because he has a higher expected income for the future. The period of lower income may be short or long, depending upon the demands made by society for the training of specialists in the various fields. Training periods may vary from several weeks or months to several years, as shown by preparation for a trade or for the medical profession. Between the two extremes are many occupations and professions. Included may be lawyers, teachers and professors, professional farmers, businessmen, and many highly skilled persons. Any one of these may have a rather long period of training to which may be added a period of apprenticeship or internship. During the period of training, incomes are usually low in relation to later earnings.

The direction the income takes depends upon the circumstances at the end of the training period. Line *b* shows the income of those who receive a definite salary immediately upon the end of the training period and who are progressive and have corresponding income increases with professional maturity.

Line *c* represents the income of those who receive a salary at the end of the training period but go through life with no marked progress and thus only little change in salary. Still others are not successful and are early lost to the profession. They enter some other occupation and their income follows the direction of that group. Line *d* depicts the income of this group.

Persons in certain fields must build a practice, clientele, or

business. Line *a* represents the income of that group. Eventually the income of the individuals in this group may go higher than that of the salaried group. The incomes for all shown in lifetime Profile 3 tend to go higher and stay higher longer than in the case of the average wage earner's income (Profile 1).

The fourth type of lifetime income stream is shown in lifetime Profile 4. Here are found the individuals who free-lance and depend upon their own creativeness or luck for their income. They are not regularly employed and thus do not have a regular flow of wage or salary. They may have investments or a savings fund which they use for family maintenance between sales or "takes." Included in this group are artists, architects, actors, authors, speculators, promoters, and others. Any one of these *may be* found in another group with a regular income. The distinguishing characteristic here is that they *depend* upon the acceptance of their infrequent expressions of creativeness for income on which to live. This is the only group that has a lifetime income similar to the annual income, since any single income peak in the lifetime may be the peak for a given year.

The suggested procedure for families on such an uncertain income is the early establishment of a leveling process—using income from high-yield periods for family needs during periods of lower yield. The money received at any given peak can be allocated to an annual base and hence to a monthly allotment for family maintenance. Families with this kind of income flow can easily fall into habits of using all the income as it is received. The result is lavish living at one time and meager existence at another. Such ups and downs may not be too difficult for adults to handle, but the insecurity and the wide range of living habits may be extremely hard on the children. The individual family must make its own decision as to how it will manage under circumstances of uncertainty. Security comes more readily as a result of forecasting needs and adjusting irregular income streams to meet these needs.

Profile 5 depicts the direction of money income in groups engaged in hazardous industries and occupations. Professional athletes and men in certain jobs in mines and the steel industry or in occupations that have a high degree of danger have such

a lifetime profile. Their income is characterized by high returns for a short period of time and a sudden cutting off of the flow rather early in life.

Line *a* represents the income of those who earn a large sum for a relatively short time and early cease to earn. Line *b* shows the income which rises higher during productive years and stays high longer than that of the first group. The stream drops suddenly when the person is no longer productive. People with incomes of this type usually are found later in one of the other groups, the particular one depending upon the capacities and training of the individual and the disposition of funds during the high earning years. For example, a famous restaurateur, once a professional athlete, used accumulated funds from the high earning period for other productive purposes, and his later income is found in one of the other groups.

Unquestionably, other possible types of lifetime income streams could be delineated. This is not necessary, however, since the typical profiles discussed show the variation in patterns from occupational group to occupational group. It should be evident that no rule-of-thumb statement of income use can justly be made that will fit all families in any income group. Improvement in use of income can come only when each family studies its resources, conscientiously faces facts of the present and desires of the future, and plans to use available means to accomplish what is desired. Such a procedure is based on an active interest in making better use of resources. The most that can be done in giving aid in income management is to indicate a method of analysis; the thinking will need to be done by the individual or group.

The analysis of goals and probable direction of the short- and long-time income streams having been reviewed, the next step in income management is to look at the family itself and ask what its relation to income is.

Stages in Family Life Cycle and Income Use

Recognition of the fact that a family passes through definite stages in its life cycle is the fourth step in income management.

An analysis of money income use cannot be complete unless the long-time family picture is paralleled with the probable long-time picture of income.

When viewed from beginning to end, the life cycle of a family with children passes through seven stages, each making a specialized type of demand upon the income stream. The following analysis shows the impact of the family's demand upon the income at the various stages of its life cycle.

STAGES OF FAMILY LIFE AND DEMANDS ON INCOME

Stages	Demands upon Family Income
1. Adjustment	Very light
2. Accumulation	Heavy
3. Grade school	Light
4. High school	Moderately heavy
5. College	Heaviest
6. Recovery or rediscovery	Either light or heavy
7. Retirement	Lightest

The recognition of the influence of the various stages in the life cycle of a family upon income use is a necessary preliminary to the forecasting of desirable accomplishments during these stages. In order to show how such forecasting for each stage aids the family in analyzing its problems of income use, the seven family stages have been superimposed upon two of the lifetime income profiles. The force of the demand within the various stages may in this way be more easily identified. If a family can forecast its probable lifetime income and locate on a curve the particular stage through which it is passing at a given time, the long-time view of needs and the resources to meet them can be visualized.

Figure 16 shows the seven family stages superimposed upon the lifetime income of a wage earner; Figure 17 shows the same seven stages superimposed upon the lifetime income of the professional man. In both, the force of greatest demand is during

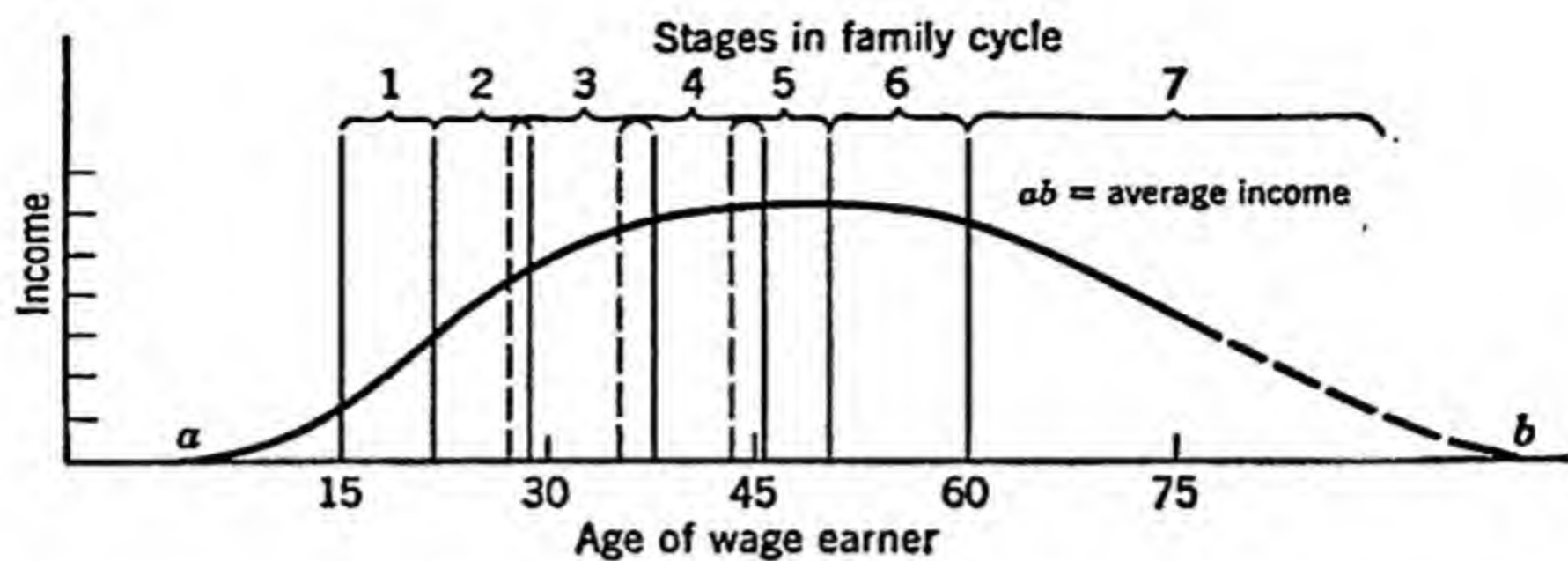


Figure 16. Average wage earner's lifetime income profile and the seven stages of the family cycle.

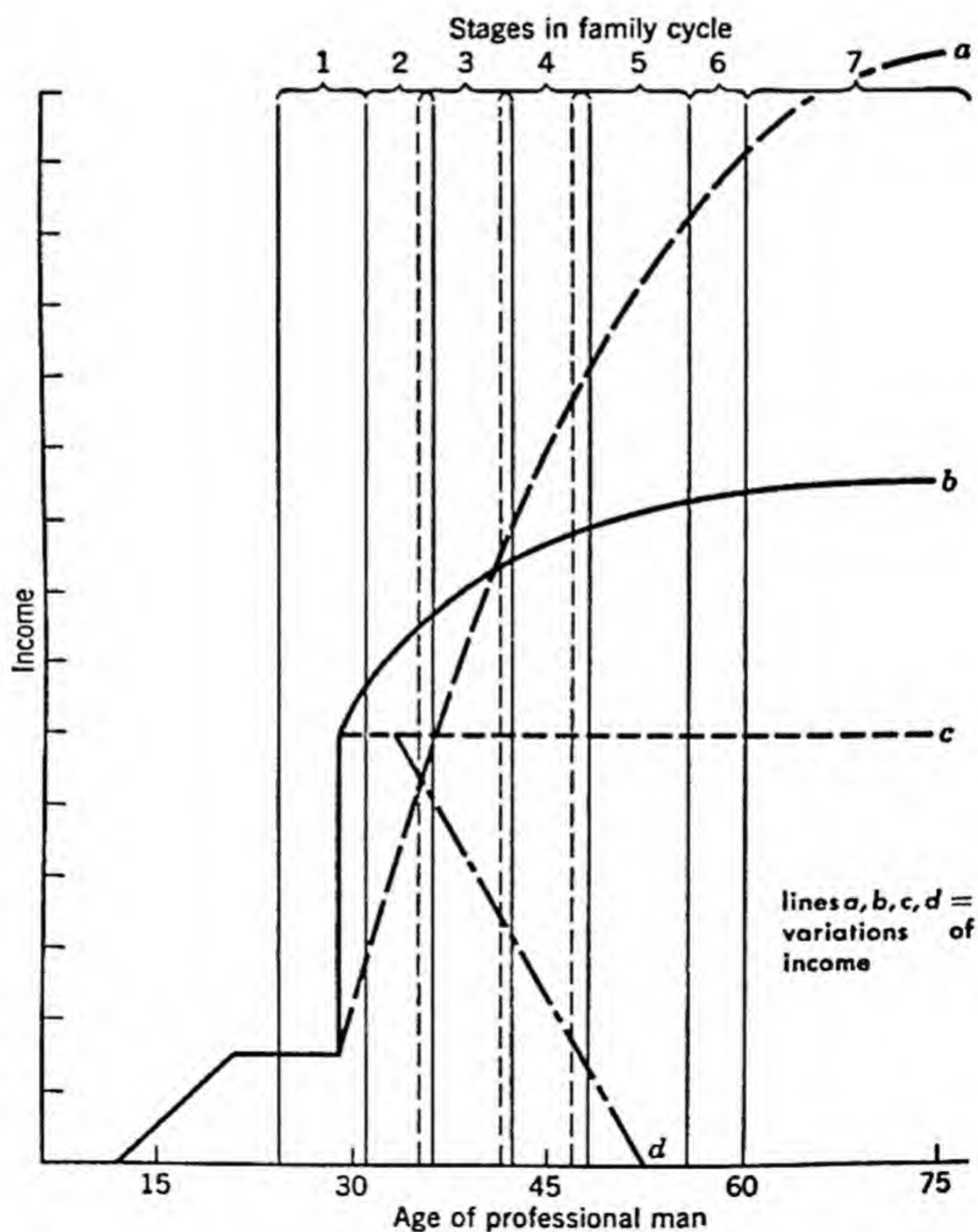


Figure 17. Professional man's lifetime income profile and the seven stages of the family cycle.

stage 5, college, or stage 4, high school, if the children do not go to college. In both groups the second force of demand is in stage 2, accumulation, while the professional group has another period of heavy demand during the time the children are being professionally trained. Stage 3, grade school, is a period of light demand; the lightest in both groups is stage 7, retirement.

Observe the differences in the two groups in the intensity of demand in relation to the difference in the age of the earners during the various stages. For the professional man the period of adjustment may be slightly longer than for the average wage earner, since training may delay marriage in this group, or marriage during training may call for much adjustment because of limited income. The period of accumulation in the professional group is shorter because of fewer children. With smaller families the succeeding stages are shortened and do not overlap so much as in the wage-earner group. Stage 5, college, will in all probability be longer for the professional man, since the likelihood that the children in this group will receive advanced training from family subsidy is greater than for the average family. In the average family, advanced training for children is frequently financed in part from some source outside family funds—scholarships or other grants and subsidies.

The recovery stage will be longer for the average wage earner than for the professional man because of the likelihood that the wage earner will need to liquidate indebtedness incurred during the period of sending children to college. Moreover, the recovery stage is shortened for the professional man since his income stream still tends to be high during this period. Both groups have about the same period of retirement, the difference being that the professional man's income tends to stay higher longer than the wage earner's because of the character of his employment plus the possibility of greater accumulation of funds supplemental to the earned income.

Synchronizing Short- and Long-Time Income Use

The fifth step in income management is to so adjust the use of short-time income as to make the long-time stream effective.

Here action is involved. This step is the most difficult of all, for it demands a belief that control of material resources for human satisfaction *can* take place and is worthwhile.

It is evident that many family financial ills arise from lack of strong motivation to use income wisely. No matter how large or how small, a better job of using it is possible if facts are faced and if the family members cooperate in solving problems of management.

Choosing a Suitable Method for Handling Money

[The choice of a method of handling money that will give all members of a family a feeling of satisfaction is a matter of major importance in the life of any family.] The thought needed in making this choice and the decisions involved in it constitute the sixth step in income management.

Five major methods of handling family income are in current use: the family finance, or budget, plan; the allowance, or apportionment, plan; the fifty-fifty system; the equal-salary method; and the handout method.] These are described on the following pages.

Five Methods of Handling Income

The Family Finance Method

[The family finance plan (the so-called budget) is the method of using income as a planned, shared family project.⁸ Direction of such a system naturally lies in the hands of the father and mother. During the early stages of the family cycle the husband and wife share jointly in planning the distribution of the income into the expenditure pattern which represents their desired living. Then as the children become old enough to understand financial matters and have wants and desires of their own, they share in the planning along with the adults.

This method is a part of the way of life of the family using it, and is based upon an understanding by both husband and wife] of the part shared experiences play in human development.

⁸ Ruth Bonde, *Management in Daily Living*, New York: The Macmillan Company, 1945, pp. 185-190.

[Briefly stated, the method is one of analysis of needs and resources to meet demands and of actually working out a plan for the use of money in accordance with this analyzed need.]

The detailed facts needed for planning can come from a study of current expenditures. Some simple method of recording these expenditures will give the basic information needed for making the plan.]

Diagram 1. The family finance plan. The rectangle represents the total income of the family (or the individual). The sections 1 to 6 represent the groups of expenditures planned for, such as food, clothing, automobile, shelter, education, and recreation.

1	2	3	4	5	6
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[If the finance plan is being made for the first time, it is desirable to keep records for a short period, and then use the information to forecast for another short period. In this way information and experience are gradually built up. The length of time chosen for gathering information can suit the individual; it may be from month to month or for several months. The plan can then be made for the full cycle of the next year on the basis of facts collected. Always the present use of the income must be adjusted to include the long-time demands, if needs of different stages in the family life cycle are to be met.]

After a working knowledge of finance management has been developed through actual experience in finding the facts of expenditure and in planning, if one desires a check on individual performance, the family may profitably investigate the way other families in a like economic group spend their money. The family has now reached the stage in finance planning in which an investigation of family-expenditure studies can be helpful and interesting in answering the questions, "Do we spend too much for certain items or groups of items? Are we spending too little; or is the amount about right?"

The Allowance Method

[In the allowance, or apportionment, method a certain portion of the money is allocated for all or a part of family living ex-

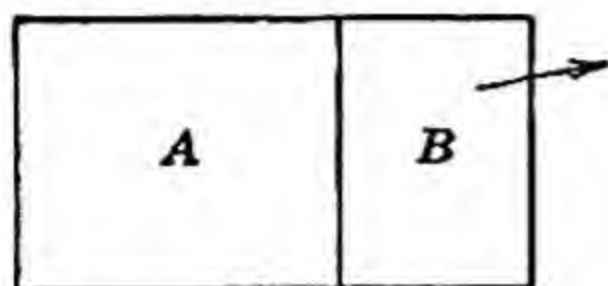


Diagram 2. Allowance method. $A + B =$ total income. $A =$ income kept under control of one person. $B =$ income allocated to part or all of living costs.

penses. As the system usually operates, the husband gives to the wife a ^{exact} stipulated amount which is to cover specified expense items in family living. The remainder of the income is used to cover other living costs, such as payments on a house, investments, insurance, taxes, or any other use the husband wishes to make of the remaining portion.

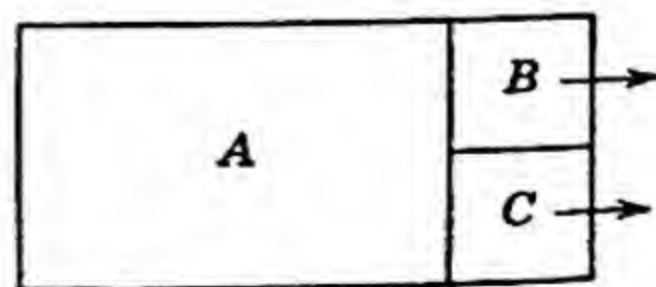
This system is likely to be used by the business or professional group with irregular incomes. The apportionment system is sometimes used as a means of declaring a family living salary from an irregular stream.] When such an equalizing process is carried forth in connection with rather careful planning, it becomes a form of family finance planning described previously.

The Equal-Salary Method

[The equal-salary method is one in which all expenses of the family are paid from the total income and the part of the income which is left is then divided equally between husband and wife as a salary for the contribution of each to the enterprise. The system assumes not only that the income is large enough to have a surplus but also that each division of the surplus represents an appreciable sum. The plan makes no provisions for managing the portion allocated to family living. Thus, that part of the income can be operated as a handout or as a highly planned system of spending.

This method is likely to be used in a family where the wife has earned before marriage or has had an independent income and feels the need of the independence that a salary would provide her.]

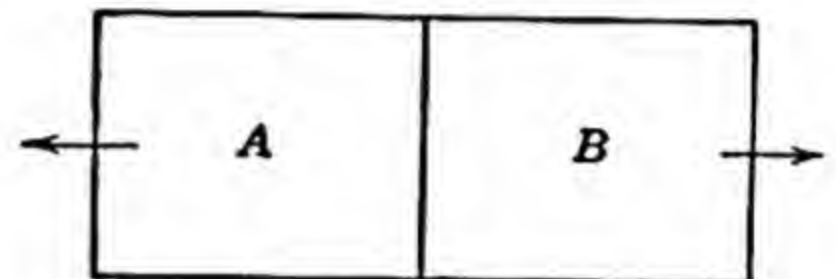
Diagram 3. Equal-salary method. The entire area, $A + B + C$, represents the income. A is the portion of income going to family living; the equal parts B and C are the surplus divided into two salaries for wife and husband.



The Fifty-Fifty System

The fifty-fifty system is a method in which the total income is divided into two equal parts, as well as the expenditures of the family. The system operates by the husband's assuming half of

Diagram 4. Fifty-fifty system. *A* and *B* represent equal parts of the income. *A* is allocated to one of two persons; *B* to the other. Each person assumes an equal share of expenditures.



the expenditures, paying them from his half of the income, and the wife's assuming the responsibility for the other half of the expenditures, paying them from her half of the income. The system assumes a known and regular income and known expenditures; otherwise their equal division could not be made.

This system is likely to be used in a family in which the wife has had an independent income before marriage and wishes to maintain a degree of independence, or it is used by a family with no children. }

The Handout Method

The handout, or doling-out, system is explained by its name. One person, usually the husband, though sometimes the wife, maintains complete control of the income and hands out small or large sums of money as needs arise or as wants are insistent enough to interest him in making the dole. The system is a carry-over from the patriarchal form of family life under which the father as head of the family was controller of his domain and dealt out benefits in money, in justice, and in judgments in all areas of family life.

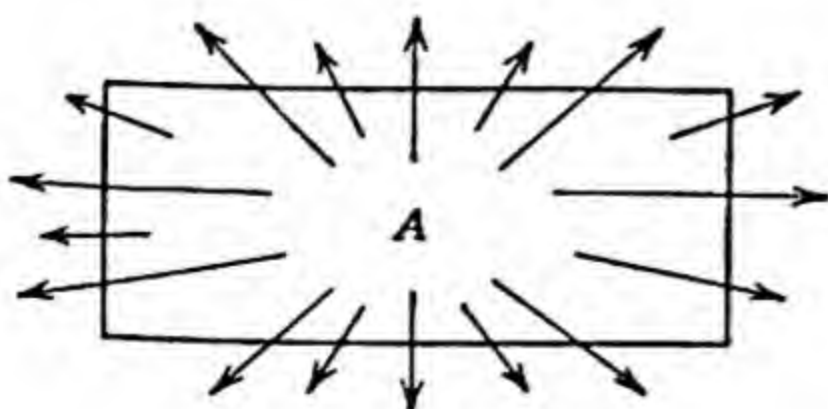


Diagram 5. Handout system. *A* represents the income. The arrows represent doles of large and small amounts.

The handout method is likely to be used in a family that has little knowledge of its exact income or one that still operates under the patriarchal system.] It represents the crudest form of family finance, with no justification in light of our knowledge of psychology, human development, and human relationships.

Criteria for Judging Methods of Handling Family Funds

Are there any bases for choosing among the methods of handling family funds or for evaluating a method which is in use? The answer is yes; criteria can be set up for judging the contribution that the method of handling income makes to family development. Five such criteria are discussed here.

Does the Method Reveal Cost of Living?

Knowledge of the cost of living means knowing the total expenditure or amount spent by the family in maintaining its daily life. The term has also a second, more refined, meaning dependent upon the first, namely, knowledge of the cost of all items of expenditure that the family feels to be essential to maintain its accustomed standard or the standard expected of it.

A knowledge of cost of living can be calculated with no great difficulty from records of expenditure, if records are kept. Certain adjustments will show up each year as new demands are made upon income or as changes in expenditure due to the introduction of new commodities alter the family spending pattern. An example of new demands upon income are the added wants of a daughter entering high school and the costs incident to her new life. Will these costs be superimposed upon old costs, or will adjustments and substitutions be made?

New commodities that often change expenditures are illustrated by the use of frozen vegetables or fruits instead of canned or fresh ones. Does the freezing and packaging of foods add to the cost of feeding the family? Are these types of food used in order to free the homemaker's time, or simply because of ease of preparation or preferred taste? Does the time released allow for other services to the family which in turn offset any added cost? Having decided these questions, the family then has a

knowledge of cost of living in terms of actual expenditures. Sometimes the saving of time by using these products is more important than conserving dollars. This is a personal choice in using a limited resource.

A knowledge of cost of living as it relates to the maintaining of standards is more difficult to arrive at but equally important. This cost of living is based upon social status and social expectation rather than upon the intrinsic needs of the group. For example, a college professor becomes an administrative officer with an increase in salary, and soon he appears driving a car from a higher price group than the one to which the family has been accustomed. His intrinsic need is no different, but he feels that his new status demands a different standard of living.

Kyrk has presented two methods for arriving at the cost of living of various groups in a community: the first method involves a study of the actual costs of all the items entering into the living of a group, such as the wage-earner group or the professional group; the second involves the formulation of budgets showing the various goods and services used by the group and to which prices can be applied at any time.⁹

If the method of handling family funds gives full or approximate knowledge of actual costs, or if potential costs can be easily computed, then the family has necessary basic information about costs of living. This information can be utilized in evaluating the method of handling funds.

Is the Method Psychologically Sound?

Frustration and emotional insecurity may stem from a feeling by some members of the family that their personal wants are inadequately understood and cared for—that their financial needs are not fully realized.

Literally, psychological soundness means that the earner for the family—usually the husband and father but often some other member or members—feels that his efforts are well enough understood and appreciated by the group so that demands beyond his capacity to provide are not made or at least are tempered. It

⁹ Hazel Kyrk, *Economic Problems of the Family*, New York: Harper and Brothers, 1933, pp. 297-303.

means also that the homemaker has, with the earner, full knowledge of amounts and manner of spending and thus feels that just recognition is given to her. At the same time she wants to feel that her contribution to the group is appreciated. It further means that each child in the group participates in the use of income in relation to his or her ability to understand.

This participation is two-way. First is the sharing in use of family income for *personal* needs, with a gradual increase of support as development in the individual takes place and comprehension of economic values grows. Second is the opportunity to share in making plans for family use of income in accordance with the child's ability to understand and to help make judgments. The extent to which children share in making plans depends upon their age, their place in the family, and the quality of the total environment. The location of the home also affects the child's interest. If the home is near a corner drug store, the child is likely to be more aware of the exchange value of money. Some homes are money-centered, some are not. In a money-centered home the child will have an earlier interest in family finances than where money is not a dominant factor in family discussion.

If the method a family follows in handling its income is psychologically sound, each member of the group will feel that he is helping in making decisions and that he is participating through sharing funds for personal needs.

Does the Method Show Savings?

If we believe in the philosophy of a living estate for the family,¹⁰ then the necessity for knowing what is being accumulated and for what purpose the fund is intended is obvious. A knowledge of savings means that there is both an awareness of the amount of current income which is being put away and an understanding of the need toward which each part of the savings is directed. Further, the plan may show the form of saving.

The wisdom of full knowledge of savings is evident, as such information keeps the family informed, shows why savings are made, where they are placed, when payments are due, and by

¹⁰ See page 242.

whom they are to be made. A sense of economic security is an important result of savings.

Can Children Share in the Handling of Money?

The importance of this criterion cannot be overstated. The satisfying development of each member of the family has been given as one of the goals in homemaking and thus in home management. In our present-day economy an individual who has little or no experience in the use of money cannot easily take his place in society. Those who work with youth either at the upper high-school or the college level observe an appalling unawareness, in fact ignorance, in youth of its responsibility for making judgments on the use of money.¹¹ Judgments in choice-making, whether weighing values between two competing desires or between two possible commodities with different qualities and prices, can come only as an individual is allowed to have experience in making these decisions. The child or youth sent forth suddenly into a situation in which he must make choices in the use of resources, with little preparation for the task, is placed at a distinct disadvantage by his parents.

The child's participation in income use is one point at which home management becomes an important part of consumer education. Homes have a responsibility to train the younger members of the family so that they may take their places with ease and intelligence in an economy in which they not only must earn a living, but also must spend and thus use that earned income.

Children are early aware of the exchange economy in which they live. Watch a group of children play store and storekeeping and see how they show interest in the exchange idea. Some parents will willingly supply their children with toy stores and shops, with an elaborate system of toy money, and then fail to see the necessity of supplying them with real money when they reach the age at which they want to make their own choices. The school can do a certain amount for children in giving the ex-

¹¹ Margaret Mildred McCullough, *A Study of College Men Students Concerning Selected Phases of Income Management During the First Year of Marriage*, unpublished master's thesis, Oregon State College, 1943.

change and choice-making experience, but no experience, with its attendant development, is the same to the child as that which he has in a sympathetic and understanding home environment.

In order that the young may have basic training in an important function which as adults they are forced to assume completely, the method the family uses in handling its income should provide for including the children.

Is the Method Convenient to Use?

Since convenience and simplicity are qualities of the mind, the criterion of ease may be conceived as one of degree. Family members may differ in their views on the convenience of a given method; that is, a method may be convenient for one but exceedingly inconvenient for another. Since the effective use of income should be a family-group project, the criterion of convenience and ease in administration *for all* can well be applied as one measure of the value of a method.

A Chart for Evaluating Methods

The following form is an attempt to evaluate the various methods of handling money income as they have been described, using the criteria set up for checking methods. The minus mark (−) indicates that the method does not meet the criterion; the plus mark (+) indicates that the method does meet the criterion. The

RATINGS OF DIFFERENT METHODS OF HANDLING MONEY INCOME

Criterion	Method					Yours
	Family Finance Plan	Allow- ance	Fifty- Fifty	Equal- Salary	Handout	
1. Reveals cost of living?	+	− or +	+	+ or −	−	
2. Psychologically sound?	+	− or +	+	+ or −	−	
3. Does the method show savings?	+	− or +	+ or −	+ or −	−	
4. Can children participate?	+	− or +	−	+ or −	−	
5. Easy to operate?	+	− or +	−	+ or −	−	

method receiving the most + marks can be assumed to be the best fitted to help a family use its income.

A glance at the evaluation chart reveals interesting facts about the different systems:

The family finance plan, or budget, fulfills all the criteria.

The allowance and equal-salary systems either fulfill all the criteria or none, which may seem a paradox. The fact is, they show all plus signs when associated with the family finance plan; they both show all minus signs when connected with the handout method. Any system which has the possibility of so much mixture of good and bad is a questionable one to use. However, family case records show both methods in effective use in families where they are combined with planned expenditures.

An examination of the fifty-fifty method shows it to be a mixture of plus and minus signs. The effectiveness of the system will depend upon the weight given to the various criteria. Since it is used largely by childless families, the fact that criterion 4 is minus is not a serious matter. The inconvenience lies in the difficulty encountered in dividing expenditures equally. With the possibility of a changing price level even within a given year, equality may be so disturbed as to throw the calculations of expenditures off a fifty-fifty basis. The handout method does not fulfill any of the criteria.

The space "yours" has been left for any family that wants to evaluate the method it is using. Maybe some device not discussed is in current use. Does it allow itself to be judged by the criteria given? No method of handling funds will prove a cure for all of a family's financial maladjustments or difficulties. Whatever the method, it is merely one way of using an important resource, money, to help gain a satisfying life for the family.

Distribution and Use of Incomes in the United States: A Basis for Comparison

After an individual or a family has gained some knowledge of his personal or the family financial situation through a thoroughgoing analysis, the next interest is usually one of comparison. Questions naturally arise: What incomes do other people in the United States receive? How does mine compare with the general

average? With the average of my occupation or profession? With the average size of the family group? With variation in types of community? And how do other people or families spend their incomes? Do expenditure patterns vary with amounts of income received by people? And are there any long-time tendencies in income distribution?

Data from selected studies, made at intervals by government agencies, research bureaus, and experiment stations, will be helpful in answering these questions. For instance, data are given on such items as income distribution by groups in the country as a whole or in divisions of it; on income by group characteristics, such as size of family, position in the family life cycle, occupation or profession; and on expenditures by similar selected groupings. By studying these data the student of family finance can gain an understanding of the way the wealth of the nation is distributed and used, and can readily make comparisons that will be helpful in directing personal and family expenditures.

The *Federal Reserve Monthly Bulletin* and selected studies published by the Board of Governors of the Federal Reserve System and made in cooperation with the Survey Research Center of the University of Michigan constitute a source of highly reliable data. These data are revised from year to year, enabling one to observe changes through a period of time. Many of the tables in the Appendix are from those studies.

Information on incomes and expenditures of wage earners in various classifications will be found in the *Monthly Labor Review* published by the Bureau of Labor Statistics, U. S. Department of Labor. State agricultural experiment station studies and publications give data for near localities.

The Heller Committee for Research in Social Economics at the University of California has developed budgets representing estimates of the cost of "health and decency" standards of living for families of executives and wage earners. They are not records of expenditures but are quantity budgets priced each year in representative districts and shops for each type of family in San Francisco. The committee does not present the budgets as ideal ways of spending to which all families would wish to adhere,

but believes they represent decent standards with which individual family plans can be compared.

The data given in the Appendix, pages 509–523, are primarily from the above sources and represent what is available at the time this book is being printed. As subsequent studies are published, the student of family finance will want to refer to them when making her analytical comparisons.

Additional References

- Becker, Howard, and Reuben Hill, *Family, Marriage, and Parenthood*, Boston: D. C. Heath and Company, 1955, Chapter 13, pp. 393–418.
- Bigelow, Howard F., *Family Finance*, Philadelphia: J. B. Lippincott Company, 1953.
- Bonde, Ruth, *Management in Daily Living*, New York: The Macmillan Company, 1944, Chapter 7.
- Cushman, Ella M., *Management in Homes*, New York: The Macmillan Company, 1945, Chapters 2 and 3.
- Donaldson, Elvin F., *Personal Finance*, New York: Ronald Press Company, Second Edition, 1956, Chapters 1 and 4.
- Feldman, Frances Lomas, *The Family in a Money World*, Family Association of America, New York City, 1957. Chapters III, IV, and V.
- Feldman, Frances Lomas, "A New Look at the Family and Its Money," *Journal of Home Economics*, Vol. 49 (December, 1957), pp. 767–772.
- Gross, Irma H., and Elizabeth W. Crandall, *Management for Modern Families*, New York: Appleton-Century-Crofts, 1954, Chapter 8.
- Gross, Irma H., and Evelyn Zwemer, *Management in Michigan Homes*, Mich. State Coll. Agr. Exp. Sta. Tech. Bul. 196, East Lansing, Mich., June, 1944, pp. 21–29.
- Hanson, Arthur W., and Jerome B. Cohen, *Personal Finance*, Homewood, Illinois: Richard D. Irwin, 1954, Chapters 1 and 2.
- Heller Committee for Research in Social Economics, *Quantity and Cost Budgets*, Berkeley: University of California Press, issued annually.
- Household Finance Corporation, Money Management booklets, Chicago: *Children's Spending, Your Budget, Young Moderns, Your Shopping Dollar*.
- Huntington, Emily H., *Spending of Middle Income Families*, Berkeley: University of California Press, 1957.
- Jordan, David F., and Edward F. Willett, *Managing Personal Finances*, Englewood Cliffs, N. J.: Prentice-Hall, Revised Edition, 1945, Chapters 1, 2, and 6.

Life (periodical), *Study of Consumer Expenditures—A Background for Marketing Decisions*, New York: Simon and Schuster, 1958.

Mitchell, A. W., "Ladies in Retirement," *Journal of the American Association of University Women*, Vol. 52 (October, 1958), pp. 25-27.

The Iowa State Bar Association pamphlet, *Estate Planning*.

Wolgast, Elizabeth H., "Do Husbands or Wives Make the Purchasing Decisions?" *The Journal of Marketing*, Vol. 23, No. 2 (October, 1958), pp. 151-158.

Campbell, Z., "Spending Pattern of Older Persons," *Management Record* 21, No. 3 (March, 1959), 85-88.

Froeder, M. M., "Single Consumers' Spending Patterns in Three Periods," *Monthly Labor Review* 76, No. 2 (February, 1959), 142-150.

Gerard, Grace B., "Financial Independence for Professional Women," *Journal of Home Economics*, Vol. 52 (February, 1960), 91-94.

Reid, Margaret G., "Families in a Changing Economy," *Journal of Home Economics*, Vol. 51 (September, 1959), 569-572.

Silberman, C. E., "The Money Left Over for the Good Life," *Fortune* 60, No. 5 (November, 1959), 134-137.

Wells, Helen L., "Financial Management Practices of Young Families," *Journal of Home Economics*, Vol. 51 (June, 1959), 439-444.

11

A Family's Savings, Investments, and Estate

NO ONE PART OF A FAMILY'S FINANCING is inseparable from another; the financing itself, as we have seen, is a part of the large pattern of individual or family living. Analysis of one finance problem may build an approach to the solution of another, but any analysis to be sound must be made with all other parts of the problem in view. This is particularly true in considering the need for putting aside some of the family funds as savings and the problems of investing these funds.

This chapter will emphasize the family's management of its income in such a way as to accumulate needed savings, and will make suggestions about the placing of such savings; but it will not attempt to give an extensive analysis of the types of investments in which the savings may be placed.¹

Savings

Savings do not accumulate automatically; in fact, for many they do not accumulate at all. For most persons and for most families, savings are the result of careful planning and usually the renouncing of some present desires. The motivation for

¹ For thoroughgoing treatments of types of investments see: Arthur W. Hanson and Jerome B. Cohen, *Personal Finance*, Homewood, Illinois: Richard D. Irwin, 1954, Chapters 12-16; and Elvin F. Donaldson, *Personal Finance*, New York: Ronald Press Company, Second Edition, 1956, Chapters 17-23.

saving may be the desire for a specific commodity in the future, such as an automobile or a house; the desire for some future accomplishment, such as a college education for a child; or fear of future impoverishment.

For a family, *saving has meaning only when its purpose is well planned and understood by all.* Saving for saving's sake is futile. Deprivation in the present because of an excessive fear of the future's unknown is unsound. The family should know why they are saving in order that they may establish a regular plan for saving. The savings program will want to be one that fits the family's needs and can be carried out without undue hardship. An overly ambitious or poorly planned program of savings may easily cause so much tension and discouragement that frustration results and the entire program will be abandoned.

For the person who is strongly motivated, a decision to place a certain amount regularly into a savings account until the sum is large enough to invest is all that is needed. *But for most persons some method of helping to establish a savings habit is necessary.* For these persons, the contracting for some type of investment which can be purchased in small and regular payment units is a more certain method of ensuring the establishment of a savings habit. Such contracted purchases may include credit union shares, certain types of insurance policies, United States savings bonds, or other forms.

The Savings Account

The savings account is a service offered by banks that is helpful in establishing a savings habit. Funds are less accessible in a savings account than in a checking account and are usually withdrawn only to meet peak expense loads or emergencies. The bank has a legal right to require a certain time to elapse between the request for withdrawal of funds from a savings account and the payment of the amount. Most banks, however, consider their savings accounts as demand deposits and refund them on request. The bank pays only a small interest rate on the savings deposits because the account is more of a service to depositors than a sum for lending by the bank.

Since the interest rate is low, the savings account should not

be allowed to grow very large unless the funds are to be directed promptly toward some given purpose. The funds saved, except the emergency fund, should be invested in some income-yielding form as soon as the amount is large enough to warrant a transfer.

The savings account may be personal or joint. The joint account is a convenience in the event of an emergency or death, for the funds are still available for the co-depositor's use. When interest is paid on a bank savings account, it is automatically computed quarterly and thus is compounded without the depositor's personal attention.

Postal Savings

Frequently family emergency funds are placed in the postal savings department of the United States Post Office. The advantage of the postal savings account is obviously one of safety of principal since the United States Government is back of it.

The disadvantages of postal savings for family use should always be weighed against the single advantage of safety. The interest rate is low, but no lower than bank savings. The first of two major disadvantages of postal savings is that the interest is not computed automatically and thus the depositor must make a personal application for his interest and redeposit the amount to principal in order to receive the compound interest return.

The second disadvantage, more serious for family finance, is that the account must always be in one name, and no one but the person named may make either deposits or withdrawals. Since the savings account is primarily an emergency or peak-load fund and not a form of investment, the purpose for which it is directed is thus jeopardized. In the event of the death or incapacity of the depositor, the sum in postal savings must await the full term of administration of the estate before it is available for use. Because of this, many families have divided the sum into two accounts, half in the husband's and half in the wife's name. The question then arises, What about the security of the children in case of accident and death of both father and mother? This is a question which can be answered only by individual families.

Decision to put free funds in postal savings should be made

with full knowledge of its limitations in serving as an effective repository for emergency funds and should not be made merely on the basis of safety.

How Can a Family Build a Reserve Fund?

Building a reserve fund goes hand in hand with developing a philosophy for and a habit of saving. In order for a person or a family to progress with relative ease and smoothness in the use of income, two things are necessary: first, an analytical approach to the use of income, discussed in the previous chapter; and second, the building of a capital fund, usually by investing savings. This fund can act as a service reserve through the family's lifetime. Such a fund can be called a *living estate* in contrast to a retirement estate because it serves the family when peak expenditures must be made and the current income is not large enough to take care of them. It can be a basis for expanding purchasing power through borrowing during the family's stage of *accumulation*; (see pages 5 and 6) and it may supply the resources for the education of a child or children during the *college* stage, and for many other purposes.

*Family capital*² may be defined as the fund or the accumulation of various kinds of property that has been amassed by a family. It may include real estate, investment securities (stocks or bonds), cash value of insurance, household capital goods (equipment, furnishings, and furniture); or it may include the investment in a profession or a business.

Family capital can be accumulated mainly in three ways: first, as a planned and regular saving of a portion of the current income that is placed in some relatively permanent form; second, as gifts and inheritances received by the family; third, as accrued earnings of any owned property, either through income yield or an unearned increment. Unearned increment is that increase in the value of property that comes about through no effort or investment on the part of the owner.

Of the three ways of accumulation, the first, savings from current income, is the method the majority of families will need

² In this book the term "capital" is used to mean the accumulation of wealth in all its various forms, making up a reserve fund of the family's assets.

to depend upon for building their fund. Even though some families are fortunate enough to receive inheritances, generations overlap and the gift may not come to the family at a time to give needed security. Usually the habit of saving should start soon after an individual is employed or after marriage takes place, if a fund is to be available for the early and middle stages of the family cycle.

Relationships between Family Money and Real Income and the Capital Fund

Since the capital fund of most families is built up by the slow process of saving a part of current money income, our thinking will be clarified if we investigate carefully more exact relationships between all types of income and capital. Five diagrams are presented to show ways of building a capital fund.

The line *ad* in Figure 18 represents the current income of a family for a year; *C* represents an established capital fund; *ab* represents the amount of income used for the living of the family for the year; *bd* equals the amount directed to some form of savings, as shown by the arrow going to *C*. The fund *C* increases by the amount of *b'd'* in the dotted addition. In turn the fund

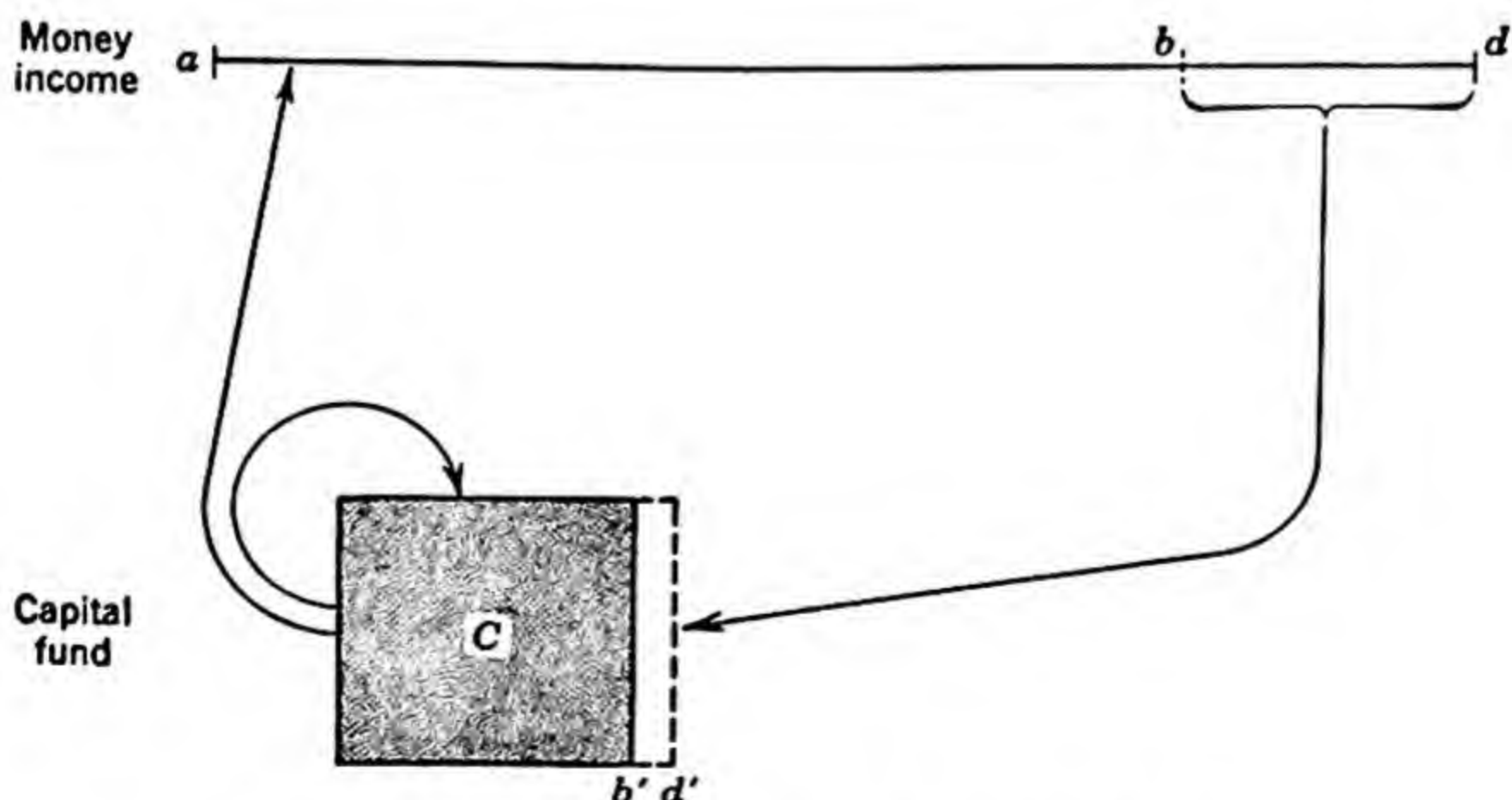


Figure 18. Money income and the capital fund.

C has earnings, and these earnings are either turned back to increase the money income, as indicated by the arrow leading from C back to *ad*, or they are allowed to accrue and compound and automatically increase the capital fund, as indicated by the arrow returning to C.

Such an analysis shows how periodic diversion of small amounts of money income may gradually build up funds to be used for specific purposes as needs arise. Savings do not just happen; they come through income management that foresees future demands and makes plans to meet them. At the same time the security of the group increases because of a growing fund which can be used as collateral in an emergency.

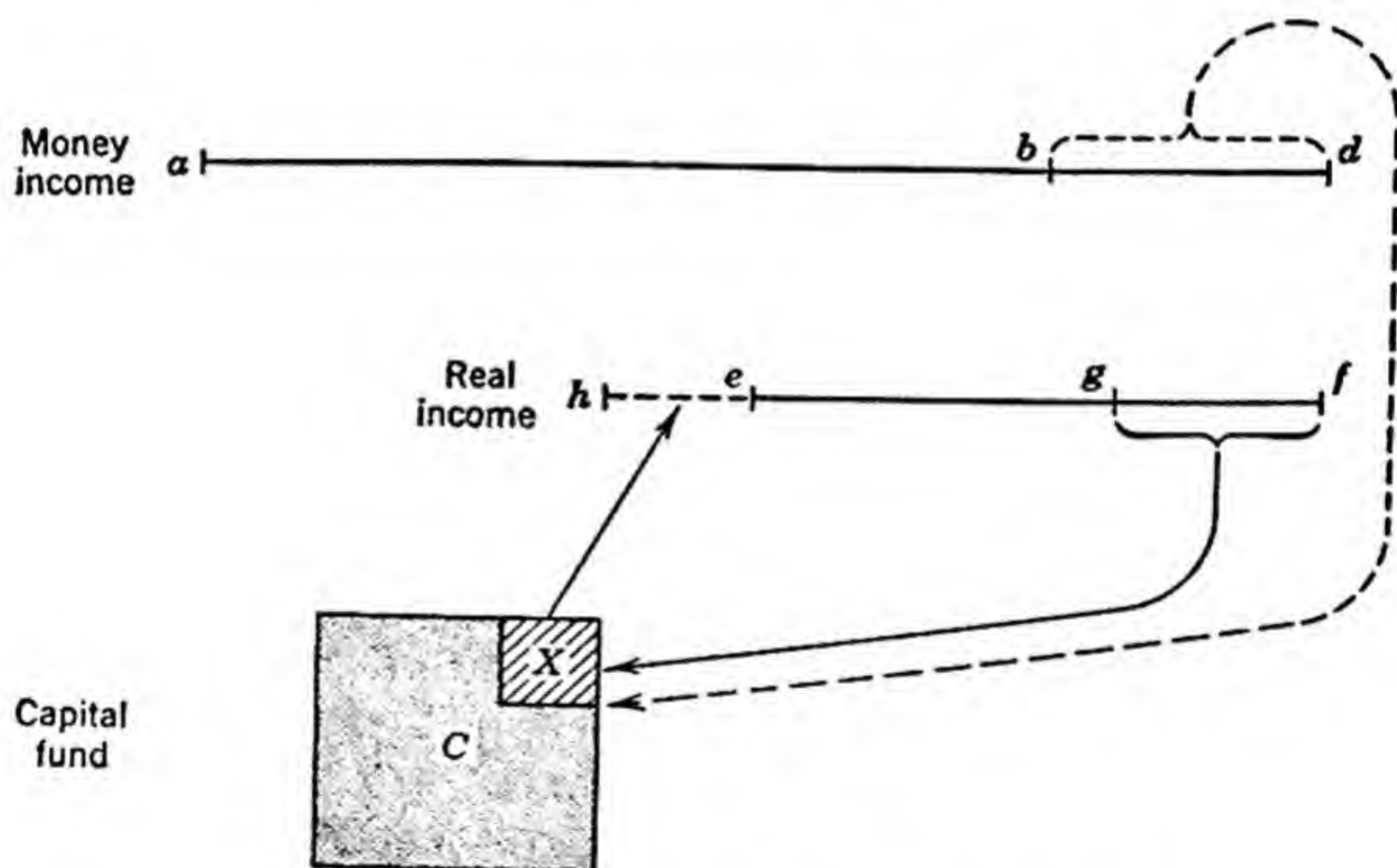


Figure 19. Real income and the capital fund.

In Figure 19 another relationship between real and money income and the capital fund is shown. Line *ad* represents the family money income for a year. Line *ef* represents the real income in terms of goods and services; *gf* equals the real income in terms of services alone. As before, C represents the family capital with the addition of X, which represents the portion of capital fund in the form of household durable goods. As shown in the diagram, one of two things may happen: either the portion of

the money income as represented by line bd may be applied in payment of a durable good (see dotted line leading to X of C), or the good may be paid for by services alone, as indicated by the solid line from gf to X of C . In turn the good returns a service that increases real income, as indicated by the arrow of return to the real-income line, increasing the line ef by eh . Either of the processes will increase the family's total value of living.

In yet another relationship between real and money income and the capital fund, real income is used to spare money income, so that money income can be diverted into other channels. Such a process is illustrated in Figure 20.

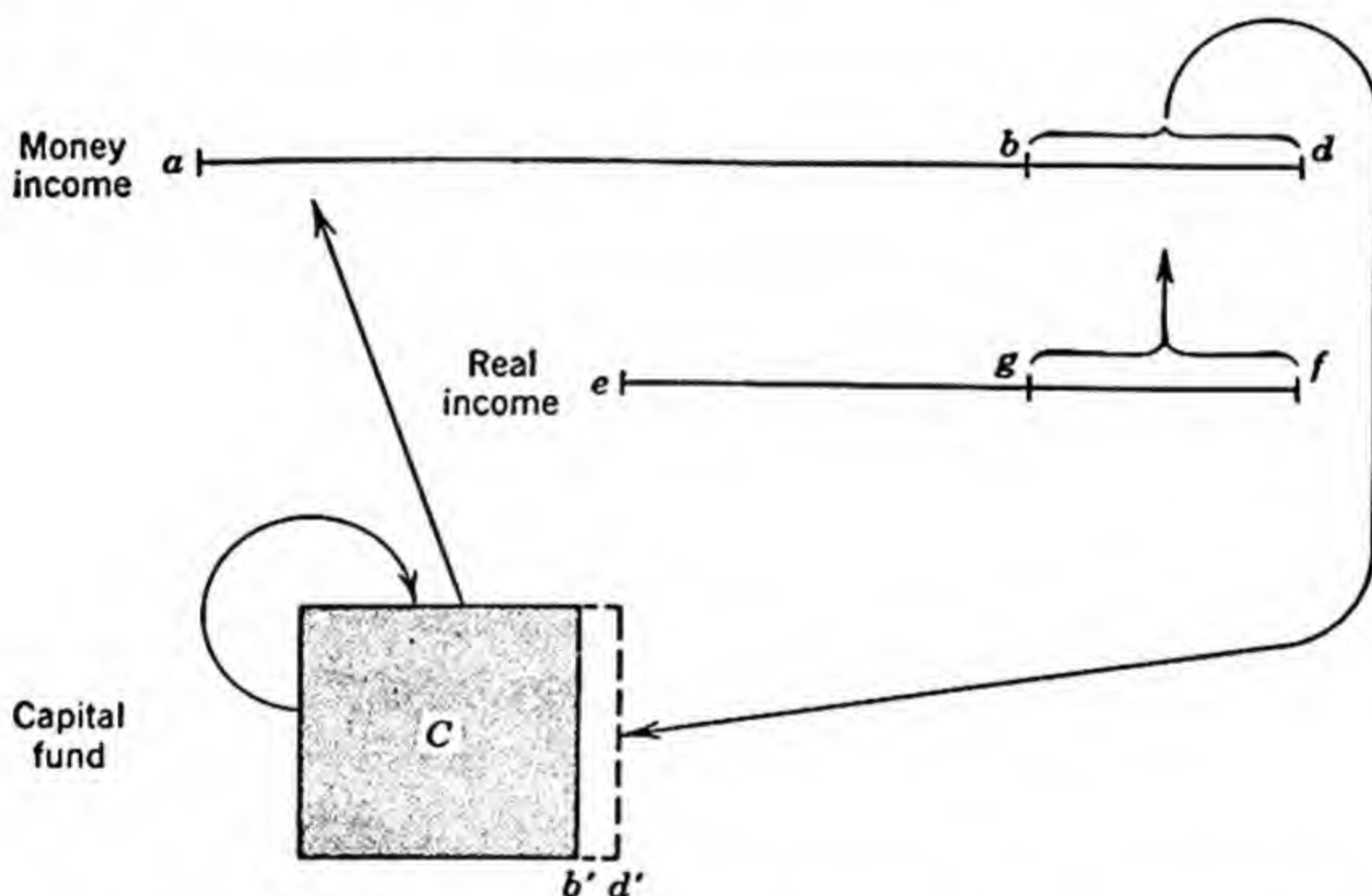


Figure 20. Real income sparing money income for the capital fund.

In the diagram the line ad represents the family money income for the year; the line ef , the real income; gf , the part of real income which is to be diverted toward sparing some part of the money income. In the process the amount of money represented by bd is put into the capital fund C , which becomes larger by the dotted portion $b'd'$. Either the total fund C earns a return which flows back to ad , or the earnings are allowed to accrue and increase C .

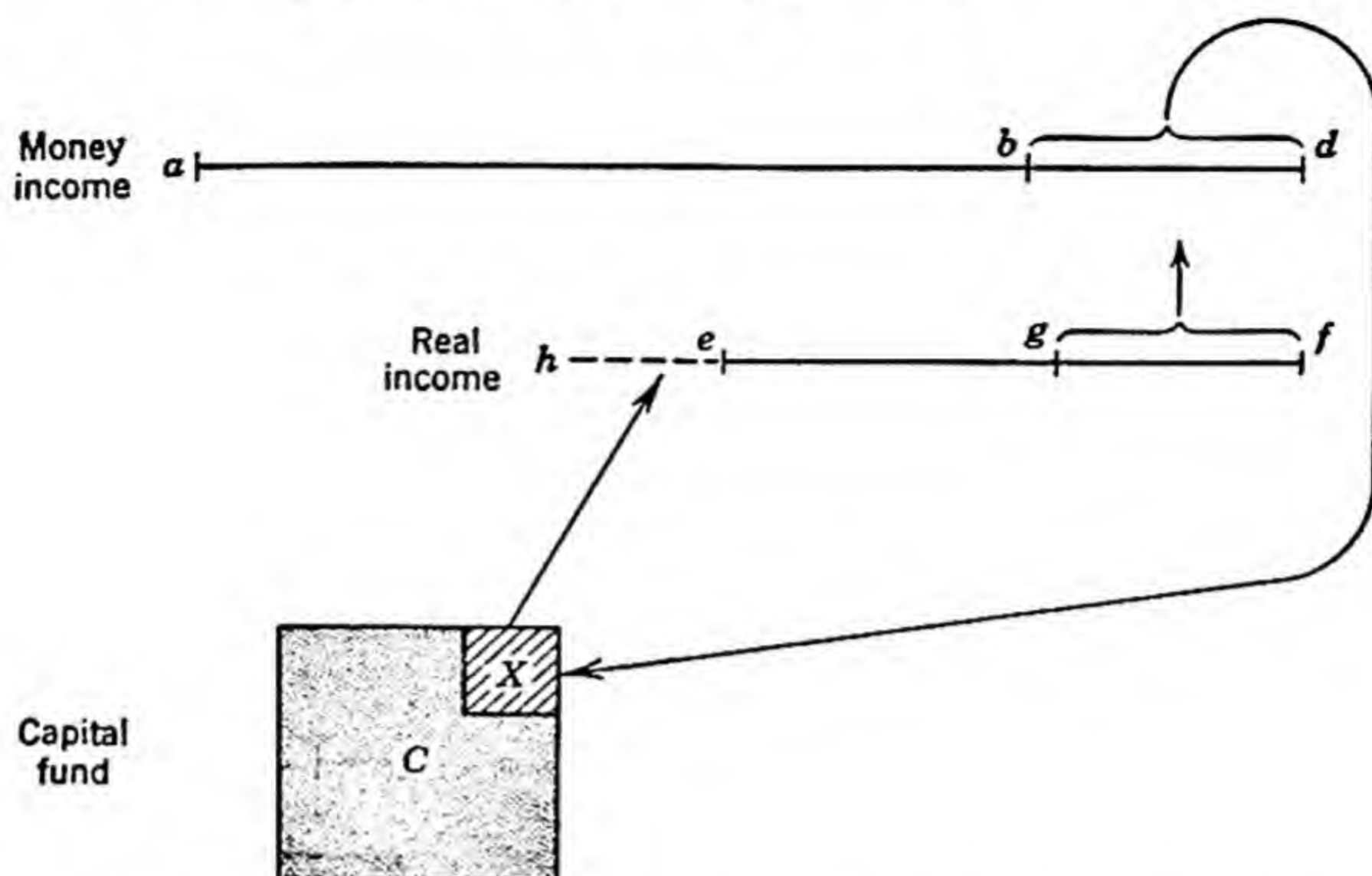


Figure 21. Real income sparing money income for a household capital good.

This alternative use of resources is practiced by all families that produce a portion, large or small, of their food supply, thereby releasing part of the food money for other uses. In the diagram the money spared has been diverted into savings, as indicated by the arrows from *gf* of real income to *bd* of money income and to *C*, the capital fund. In the urban home the family may dispense with paid help by doing its own work and thus divert that sum to another purpose. In either farm or urban home, if, for instance, the family services are used in making furniture, clothing, or household furnishings, the result will be the same.

In Figure 20 household goods (*X*) would enter only if the spared sum is invested in a household good, in which case the relationship would be that shown in Figure 21. That part of real income represented by *gf* spares money income *bd*, which is invested in a household good, *X*. This in turn extends the real-income line by *eh*, thus increasing the total value of living of the family.

The relationships between income and capital funds shown

in the two foregoing examples suggest possible methods of increasing the total value of the living of any family finding itself with a lower money income than will meet its needs. The process of sparing money income by using real income has additional value to the family if the sparing is carried forward as a creative family project. The intangible benefits from cooperative enterprise, common purposes, and group activity are immeasurable from the point of view of the development in fine family relationships.

Another possible relationship between money and real income and the capital fund should be examined. In it a part of the current income is invested in a durable good which has power to produce over and above family need. As such, it not only may return services and increase real income but also it is capable of producing goods for sale, thereby returning a cash income. Such a productive good shows a *net* gain over the original cost of the article. This process is pictured in Figure 22.

The real income in Figure 22 is shown as sparing the money income for the purchase of the durable good. However, a part of the money income could be diverted without the sparing

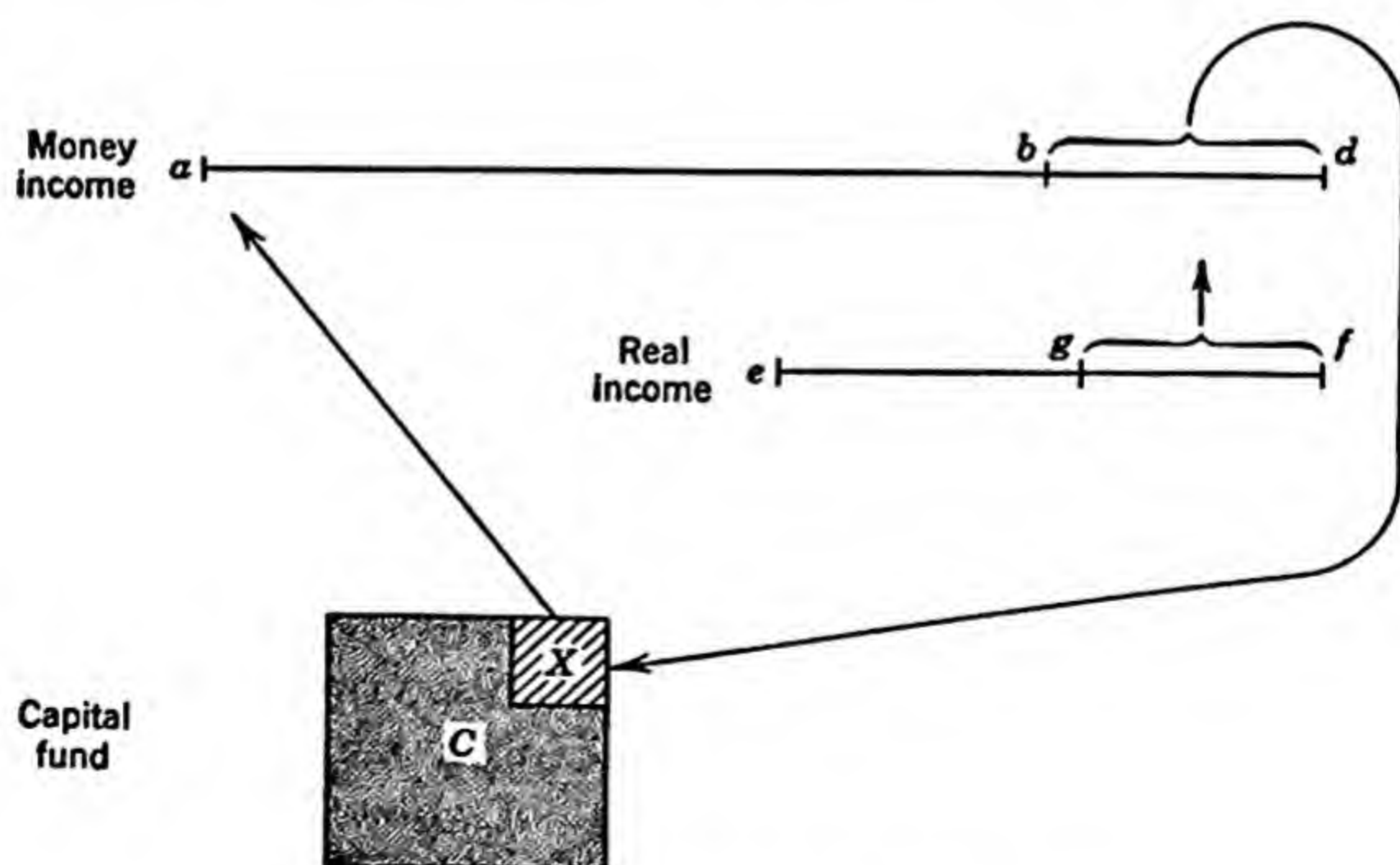


Figure 22. Money income and capital good.

process. In either case the money *bd* is invested in a household good, *X*, which in turn earns a cash income to be added to *ad*, as indicated by the arrow of return from *X* to *ad*. The possibilities of this procedure for a family might be the purchase of a mixer which would enable them to earn cash income through the sale of various food products such as cakes or mayonnaise; the purchase of a sewing machine for use in selling dressmaking services; the purchase of a washer for laundering for pay; or again a typewriter for selling typing services.

Investing Family Funds

After a family has decided upon a savings plan and the building of a capital fund, decisions must be made about the wise investment of the fund. People who know investment practices are constantly amazed at the carelessness with which many people invest the money they have saved with so much effort. Many people who buy securities or otherwise invest their savings have practically no understanding of the nature of their commitments.³ The investment experience of many families would be a much happier one were they first to make a careful study of the quality of the enterprise where they plan to place their money.

What Is a Family Investment?

Investing funds is the process of placing them in a more or less permanent form, with the expectation of assuring the security of the principal and of receiving a regular and predictable return on the principal. This return is the *income yield* from the investment.

Another process of placing funds is known as speculation. In speculation the major emphasis is upon profits from appreciation of the principal rather than upon security of principal and a moderate and certain return. Speculation, therefore, may risk the principal for the hope of obtaining a larger profit. Since the principal may depreciate instead of appreciate, speculation may jeopardize the security needed for family funds.

The line of demarcation between investment and speculation

³ Elvin F. Donaldson, *op. cit.*, p. 372 and Chapter 17.

is not a clear-cut one. Speculation often has some elements of a conservative investment; and in every investment, because of the flaws in human judgment, there is some uncertainty and risk. Nevertheless, when funds that are to be used in long-time family plans are at stake, the speculative elements should be reduced as much as practicable and the investment elements emphasized.

Persons or families with only a small amount to invest will do well to provide themselves with adequate life insurance or small-denomination savings bonds, establish a savings account for emergencies, and omit the thought of purchasing securities that may be speculative in nature or of making investment in other uncertain enterprises.

Types of Investments Available

Two general types of investment available for family surpluses are (1) ownership and (2) creditor. In ownership the purchaser receives title or legal right to property which is registered in his name, and he carries the responsibilities imposed by law for this privilege. In creditor investments a loan is secured by a legal credit instrument. Even though the investor buys a bond, the legal transaction is a loan of a given sum to an enterprise with the promise of repayment of the principal at a given date and payment of interest for the use of the sum until the date of payment.

The usual forms of ownership investment for families are: real estate (residential property, land, business houses, apartment houses, factory buildings); stocks or shares in corporate enterprises; livestock; private business enterprises; and life insurance policies. The usual creditor investments are: bonds (government or corporate); real estate mortgages; notes receivable; and certain kinds of contracts.

Corporate Securities

Any one of three forms of securities may be purchased from a corporate enterprise, thereby making the purchaser part-owner, creditor, or both part-owner and creditor. Preferred and common stock represent the extent of the purchaser's share in the

company; the purchase of bonds makes him a creditor of the company. The preferred stock carries a definite dividend rate, and, no matter what the company may earn, the holder of preferred stock receives no more than the specified rate of return. Cumulative preferred stock carries a definite dividend rate that is retroactive; that is, if no dividends are paid for a year or more, cumulative preferred stock must be paid first, when payment is resumed, for the years in arrears. The holder of common stock carries no specified dividend rate, and the owner's share in the profits is determined by the board of directors. It is dependent upon the amount of surplus earnings after indebtedness has been met and preferred dividends have been paid.

The bonds of a company are the most secure investment among its commitments, since they are indebtedness and must be paid before owners share in the profits. The preferred stock is the next ranking security since it carries a definite rate of yield and so gives greater certainty of return. The common stock is the least secure investment, for it is the last to share in the earnings. However, common stocks in some companies may be a better investment than bonds in others. Only careful investigations can reveal the comparative value of securities of different companies.

Investment Preferences of Different Income Groups

Are there differences among different income groups in their preferences for certain kinds of investment? The Board of Governors of the Federal Reserve System answers this question for a group of spending units with incomes of \$3,000 and over in its report on "The Financial Position of Consumers," published annually. The data are analyzed as to preferences for investments of fixed value, of fluctuating value, and of combinations of the two. The study also gives a comparison of the data for three years in a five-year period, showing what changes have taken place.

As might be expected, the spending units in the lower income brackets have a greater preference for investments of fixed-value type than have the spending units with the highest income sampled. See Table 31 of the Appendix, page 519. It is sug-

gested that you study this table and note other comparisons that will also be of interest to you.

Tests of an Investment for a Family

(In evaluating an investment, a family will want to consider (1) the safety of the principal, (2) the income yield, (3) ease with which the security can be sold, and (4) the amount of management and care required.)

Safety of Principal

The most important feature of an investment for a family is the safety of the principal. Will the family be able to recover the amount invested? The first step in determining the safety of an investment is to ascertain the nature of the business enterprise.

If the enterprise is that of a governmental body, national, state, or municipal, the nature of the bond issue will be the major consideration. The buyer of the securities will want to be assured that the purpose of the issue is both commendable in public estimation and congenial to personal policies and beliefs.

If the enterprise is private or corporate, the investor in addition to learning the nature of the business should investigate its history of operation, its policies, and its practices at different stages of the business cycle. The average family should avoid investing in an enterprise that is in a too-early stage of development or in one that has passed the peak of its business development.

Securities that show rapid or wide fluctuation in value in relatively short periods of time are not sufficiently secure to guarantee safety of principal for the investment of family capital fund.

The collateral value is another important quality of any securities in which family funds are to be invested. Collateral value refers to the value of a security when used as a pledge to assure repayment of a loan. This value depends on the safety and stability of the principal. It is important that family investments have high collateral value since it is this quality that determines the amount of loan for which they will be accepted

as security and the terms on which the loan can be obtained. A somewhat larger loan could be secured with a \$1,000 government bond, for example, than with a certificate of highly fluctuating common stock with like value at the time of the loan.

Legality is also a quality determining the safety of an investment. The investor must make certain that all points of the law have been fulfilled, especially in creditor types of investments—bonds, mortgages, and contracts—and also in corporate business, because states vary in their laws of incorporation. In the purchase of a security from a local enterprise, the legality of the business organization is particularly important.

Income Yield

(The certainty and the regularity of the income yield are of importance to investors who wish to build up a capital fund and to live on the yield from the fund.) The return from certain types of securities is more predictable than that from others. For example, the interest from corporate bonds must be paid regularly by the corporation issuing them or the corporation may meet with financial disaster, whereas dividends on corporate shares can be passed, that is, the board of directors of the corporation may at any time vote not to pay them.

The rate of return on an investment is usually an index to the safety of the principal. Certain kinds of investments pay a uniform rate of return; other kinds fluctuate widely from year to year. At certain periods of business activity, demand for capital is greater than at others, and interest rates of creditor investments and dividends of stocks also vary. During periods of reduced business activity, when demand for capital is light and money is easy to borrow, interest rates may be low and dividends may be passed entirely for a period of time.

United States government bonds represent the safest investment for the American family. Their rate of yield is relatively low, $2\frac{1}{2}$ to 4 percent, rarely higher than 4 percent. Other investments having much higher yields may also be safe, but the investor should realize that a high average return may in time result in loss. Many investors use the current rate of return on long-time United States Government Treasury bonds as a basis

for judging the excellence of their investments. They assume that any security yielding more than twice as much as Treasury bonds involves too much risk to be considered good. Other, more conservative investors consider that one and one-half times the Treasury rate is the maximum yield to anticipate from a good investment.

③ Ease of Sale

The marketability of an investment, or the ease of converting a security into ready cash, should be considered in planning an investment program for the family. Family conditions change, and it may become necessary to use a part or all of the capital funds to meet the changed conditions. To be ready to meet the needs brought about through change, part of the family's investments should be in a form easily convertible into cash.

Long-time investments, such as farm lands or a house for the family, may be difficult to dispose of at a price approaching 100 percent on the dollar invested, since real estate is not always readily marketable. Government bonds, on the other hand, are more highly fluid and in normal times can be sold for nearer their full value.

All creditor investments carry a date of maturity, which is the day that payment of the security is due. Some kinds of securities run for longer periods than others. Bonds, for example, usually run for longer terms than mortgages. Some bonds mature in 10 or 20 years, whereas mortgages commonly run for 3 to 6 years, unless they are insured by the government, in which case they run for a longer period. Usually the nearer the date of maturity the more readily salable is the security.

The date at which an investment is to mature may be important for a family that plans to have funds available for a known future need. For example, the family that wishes to plan and invest funds so as to have them available for a college education for a child may purchase a security that will mature near the time the child will be ready for college.

Management and Care Required

In choosing an investment for family funds, the amount of knowledge required for the management of the investment and the oversight necessary to ensure its success must be considered. A family may be influenced to make an investment that results in a loss simply because they did not foresee the problems involved in the management and care of the property acquired. For example, a college professor in a northern university purchased a part interest in a Mississippi pecan orchard. Fifteen hundred miles from his investment, the professor was unable to direct the management of the orchard effectively even though he had the necessary knowledge of orchard operation. Because of poor management, his losses were heavy.

Family funds accumulated through success in one type of business may be lost when invested in a new business which the purchaser expects, without special knowledge of its management problems, to operate successfully. For example, a farmer may sell his farm, invest in an unfamiliar business, and fail in operating it because of lack of experience and knowledge.

Securing Information About Investments

In deciding upon the investing of funds in industrial securities by either a family or an individual, care should be taken to investigate *each* phase of the elements of a good investment before a commitment is made. Securing adequate information about these securities may prove to be a real problem for the investor. The advice of a reliable investment counselor may be obtained or publications may be relied upon. A number of recognized publications giving useful information about major industrial securities are available to the prospective buyer. Usually, the local banker can furnish information about these publications. The bank either subscribes for one or more of them or has access to them through a correspondent city bank, and thus can furnish the desired information. Or, in a large town or city, the library may have the publications. Only information about major industrial enterprises operating on a national scale is included. Facts about small local business enterprises will need to be secured from local sources.

The publications in the following list are standard sources of information about investment securities:

Moody's Investors Service, New York.

Standard and Poor Corporation, Poor's Publishing Co., New York.

Standard Statistics, Inc., New York.

Fitch Investors Service, New York.

Old Age and Survivors Insurance, a Form of Savings

✓ In 1935 Congress passed the first version of the Social Security Act, and since that time this act has undergone a series of amendments. The part of the act that is of interest to families and students of family finance is that pertaining to Old Age and Survivors Insurance. The program instituted by this phase of the act was designed to bring basic economic security to individuals and families—*basic* because its purpose was to provide minimal income to large numbers of citizens when they might need it most to stave off destitution.

The original act covered some 8 million people who were employed in business and industry. Later amendments now cover many other groups, namely: agricultural workers, regularly employed domestic servants, employees of charitable, educational, religious, and scientific groups and societies, and self-employed persons who earn a net profit of \$400 or more a year. This latter group includes operators of businesses, accountants, architects, farm operators, professional engineers, funeral directors, clergymen, dentists, physicians, optometrists, osteopaths, lawyers, and veterinarians. The age of retirement is placed at 65 years, although an amendment passed in 1956 reduces the retirement age of women from 65 to 62 (with a reduction of benefit in some groups), and the permanently and totally disabled workers from 65 to 50. The program now covers from 75 to 100 million people in all walks of life and, in reality, represents an enforced form of savings.

Strange as it may seem, a vast number of employed workers pay the specified amounts regularly without having much knowledge of the extent of the benefits provided by the act. And many

self-employed persons do not know that they are eligible for certain benefits.

Every wage earner employed by an organization or a business covered by the Social Security Act or its amendments has $2\frac{1}{2}$ percent of his total earnings deducted each pay day in 1959 (up to \$4,800). His employer pays the same amount, making the equivalent of 5 percent of each wage earner's earnings paid to the federal government as a premium for the Old Age and Survivors insurance coverage for this period of time. The rates displayed below show the increasing percentages withheld, by dates. The rates for self-employed people will also change as shown.

SOCIAL SECURITY TAX RATES

Effective Date	Employee, %	Employer, %	Self-Employee, %
Jan. 1, 1959	$2\frac{1}{2}$	$2\frac{1}{2}$	$3\frac{3}{4}$
Jan. 1, 1960	3	3	$4\frac{1}{2}$
Jan. 1, 1963	$3\frac{1}{2}$	$3\frac{1}{2}$	$5\frac{1}{4}$
Jan. 1, 1966	4	4	6
Jan. 1, 1969	$4\frac{1}{2}$	$4\frac{1}{2}$	$6\frac{3}{4}$

The tax on the earnings of the self-employed is based on *net* earnings beginning at \$400 and ending at \$4,800. These earners pay their social security tax at the time they pay their income tax.

The benefits which participants in the social security program receive, or will receive, vary with the length of time over which they have made payments to the government, the average amount of wages earned, and the date of retirement.⁴ The U. S. Department of Health, Education, and Welfare, Social Security Administration, publishes a series of small pamphlets giving in simple language details which are of interest to eligible beneficiaries. These can be had for the asking. In fact, the personnel in charge of the local Old Age and Survivors Insurance office are most willing to explain the benefits and to answer questions relating to the program.

⁴ Arthur W. Hanson and Jerome B. Cohen, *op. cit.*, pp. 272-293.

The term "minimal income" has been used above to emphasize the point that both individuals and families will want to think of whatever benefits come to them under the program—whether for retirement or for children left fatherless—as a nucleus for taking care of their needs and not as representing a complete savings program. Although the benefits that come may spell the difference between destitution and minimal living in old age, they do not furnish a capital fund that would make for flexibility in financing a family. They are not part of a "living estate," but are directed solely at saving young families and retired individuals from being left penniless.

Family Financing for Taxation

All taxes affect the consumer in some way, either directly or indirectly. Those that the family must pay, and so alter the way current income can be used, are: the federal and state income taxes; general property taxes; sales taxes, both federal and state; the social security tax; and certain other specified taxes, such as inheritance taxes (see page 262).

Both the social security and the federal income tax are on a pay-as-you-go basis. This method was applied to the federal income tax because of the difficulty many people found in paying their tax in one lump sum and the difficulty the government found in making collections. It works as follows:

By April 15 of every year every taxpayer is required to file with the government an estimate of his income for the current year. If he is a wage earner or a person on salary, his employer must deduct an appropriate amount from each pay check. If the amount to be thus withheld and paid to the government by the employer is less than the estimated total tax, the taxpayer must pay the difference, either at the time he turns in his estimate or in quarterly installments during the year. If one is a professional or self-employed person, or is not paid regularly, he can elect to pay his tax when he submits his estimate or in semiannual or quarterly installments during the year.

If by April 15 of the following year, when the final income tax statement for the past year must be submitted, the taxpayer has

paid less than the amount due, he must then pay the difference. If he finds that he has overpaid his tax, he may collect the amount of overpayment or leave it as a credit against the current year's tax.

Because the tax laws change, no rates as basis of calculation are presented. The student of family finance can get the current regulations by consulting the deputy internal revenue collector, who is usually stationed at the local post office.

Tax laws are complicated and not easy to understand. Thus the taxpayer is privileged to consult a tax expert or a lawyer to get help in computing his tax. In order not to pay more than is required and at the same time not to be guilty of paying too little, it behooves the taxpayers to secure this help, which is available at a reasonable cost. Also the Internal Revenue has representatives who assist with filing tax returns at no cost.

Many states also require the payment of a state income tax. The rates, basis of calculation, and date for filing vary from state to state, though usually the tax is due by April 15 of the year following the year of earning. Each taxpayer must declare his estimated tax for the coming year by that date, and either make payment then or through the year, according to regulation.

The general property tax is used as the source for the operation of local government. The tax is the obligation of the owner of property in the section in which the property is located. The general property tax is of two kinds, personal and real. The property tax varies in rate and payment from state to state. In some states both personal and real property are taxed, in others only real property, and in others income tax takes the place of either personal or real property tax. *Every family should investigate the tax obligation imposed by the state and local governments where it resides.*

The sales tax may be imposed by either the state or the federal government. It acts to raise the price of a commodity or utility purchased currently. Familiar is the 2- or 3-percent sales tax that is applied in many states, the federal tax on telephone messages and telegrams, and the federal luxury tax on jewelry and cosmetics. People can avoid some of these taxes simply by not buying the items taxed, but there is no avoiding the federal

or state income tax or the general property tax, all of which must be paid as legislation and regulation decree.

Without question, the system of dividing income-tax payments and making it possible to pay them at intervals during the year has greatly eased the meeting of that tax obligation, and thus has been of real service to all citizens. There remains, however, a considerable amount of other tax responsibility that must be planned for and arranged. The property tax is usually paid twice a year, an automobile license fee must be paid by a fixed date; and the personal-property tax carries a deadline for payment. These tax obligations cause peak-load expenditures in certain months of the year since the usual living costs must be met regardless of other obligations. Foreseeing the tax demands and saving money each month to meet them, or making plans to reduce other expenditures during those months, becomes an urgency if the family is to remain solvent and pressures and tensions reduced.

Trusts, Wills, and Estates

Trust Funds for Families

A trust provides a means of conserving funds or properties by transferring the management and care to a well-qualified administrator, either a person or a financial organization. It is a legal arrangement whereby the funds or properties are placed in the safekeeping of a disinterested party, called a trustee, and the returns are paid to another party, called the beneficiary. The object of the trust fund is to supply more able management of properties than the person who is destined to receive the benefits is qualified to give. Such an arrangement assures the creator of the trust that the person or persons for whom it is created will be more adequately provided for than by an outright bequest of the properties.

In creating a trust, the principal value of the fund remains intact, provided that no disastrous change in values occurs, and the beneficiary receives the income from the invested funds. The creator of the trust may specify the amount of income the beneficiary is to receive, the term of years he wishes the trust

to remain in force, and the disposition of the properties making up the trust at the end of the term.

The establishment of a trust fund is a practical method for ensuring financial care of dependents, and in family financing it is frequently used by a parent for a child or children, or by a husband for a wife. It is also used by people of wealth as a means of endowing a worthy cause, such as an educational project or institution.

The amount placed in trust may be large or small. Of late years the idea of a trust fund has grown more popular among people of moderate incomes. Formerly, it was a device used largely by the well-to-do for safeguarding and conserving family fortunes.

The management of a trust fund may be carried by a person or by a local bank or by a company organized primarily for handling such business. Usually the managing agency charges a retaining fee for its services.

Wills and Estates

A properly drawn will greatly simplifies the distribution of an estate. When no will is made, estates must be settled and distributed according to the laws of descent and distribution of the state in which the individual has lived and owned property. This often results in inequitable or unfortunate settlements.

Making a Will

Anyone of legal age and sound mind has the privilege of making a will and leaving his property to one or more individuals. In most states the law provides that any person, male or female, 18 years old or over, may make a will of personal property, and any individual 21 years old or over may make a will of real property. A will is a simple declaration of:

Who is to receive the property.

At what time after death it is to be received.

In what proportions the property is to be divided.

Who shall settle the estate.

Under what particular conditions it is to be handled.

A person may make his own will but he must do the signing and declare it to be his will in the presence of two or more witnesses, who also must sign the paper as witnesses in the presence of each other and the maker of the will. If a considerable amount of property is to be disposed of, or if complex situations are involved, it is advisable for the maker of the will to seek the advice of a competent lawyer.

Laws of the state regarding descent, distribution, and administration of property may be ascertained from a lawyer. If the law will divide and settle the estate as the owner of the property wants it done, a will is not necessary, but this does not often happen. If the owner wishes to distribute his property in a manner different from that established by the state laws of descent, then he should have a will drawn up.

The individual who dies with a will ordinarily names someone, known as an executor, or executrix if the person is a woman, to carry out the terms of his will. The person who dies without a will leaves his property to be settled by an administrator appointed by the court.

In the latter case the surviving husband or wife receives a dower or life estate of one-third of all properties which the deceased has owned during marriage. Dower rights are not defeated by a will. The laws for distribution of property when no will is left are based on whether a man or woman is married or single and whether he or she has one or more children. In the event that there is no immediate family, the closest relatives are next in line of descent. A will removes many causes of family jealousies and disputes which are likely to arise if no provisions for the survivors are made.

It is not unusual for the husband to make a will appointing the wife sole devisee and executrix and for the wife to make a will designating the husband as sole devisee and executor. When the wife has earned money before or after marriage or when she has received bequests of personal property or money, it is advisable for her, as well as her husband, to make a will.

Joint Tenancy

If a piece of property is held in joint tenancy by husband and wife, at the death of either party the property belongs to the other party without probate or court proceedings by right of survivorship. Property so held cannot be diverted by either party by will.

Donaldson says, "In addition to calling the persons joint tenants, it is generally necessary that the following four requirements be met in order to create joint tenancy:

"1. The interests of the joint tenants must stem from the same deed or conveyance.

"2. The interests of the parties must begin at the same time.

"3. All the joint tenants must have the same and similar interest in the property.

"4. All the tenants must be entitled to the entire possession of the property at all times."⁵

Property held in joint tenancy is taxable to the extent to which the deceased has contributed to the purchase price. Under the federal law and under the laws of some states the full value is presumed to have been supplied by the deceased and is thus taxable unless the survivor can prove to have contributed a part of the purchase price.

Some states have enacted laws in an effort to abolish the right of survivorship in property held in joint tenancy. If, however, the deed states that the title to the property is vested in the joint tenants, then the right of survivorship is established.

Inheritance and Estate Taxes

The only persons or families concerned with inheritance and estate taxes are those who are fortunate enough to have property left them by will or otherwise. Important for them to understand is what is meant by these taxes, who must pay them, how much must be paid, and when it must be paid.

The terms *inheritance tax* and *estate tax* are often confused. They are not synonymous, as is often supposed. The inheritance tax is levied on those who inherit property; the estate tax is

⁵ Elvin F. Donaldson, *op. cit.*, p. 358.

levied on the estate itself. And so in the settling of an estate both types of taxes may have to be paid.

Every state in the United States except Nebraska levies an inheritance tax and an estate tax. These taxes, as would be expected, vary from state to state in a number of respects: in amount of exemption allowed, in the rates applied under different relationships between the legatee and the deceased, in the cost of administering and closing an estate, and in the time required for the payment of the taxes and the closing of the estate.

The federal estate tax is levied upon the "gross estate," meaning on the fair market value of all real and personal property making up the deceased's holdings, except those situated outside the United States. The law allows certain exemptions and deductions, which are taken into consideration in determining the "net estate." From this net estate an exemption of \$60,000 is allowed.

Thus the federal estate tax is of importance only as applied to a fairly large estate. Furthermore, it is graduated with the size of the residue after deducting \$60,000. On the first \$5,000 above \$60,000 a rate of 3 percent is applied. On successively larger amounts higher rates are indicated, until on very large estates a maximum of 77 percent is applied. This federal estate tax is payable 15 months after the death of the deceased, although in complicated cases the government may take much longer to compute and impose the tax, thus holding up the settling of an estate for a matter of several years.

The person or persons who are the legatees of an estate, and particularly of a large one, will do well to seek advice from a competent lawyer early in the settling of the estate. Substantial savings may often be realized by having expert advice from the beginning.

Additional References

- Donaldson, Elvin F., *Personal Finance*, New York: Ronald Press Company, Revised Edition, 1956, Chapters 8, 16, 17, 24, and 25:
Hanson, Arthur W., and Jerome B. Cohen, *Personal Finance*, Homewood, Illinois: Richard D. Irwin, 1954, Chapters 4, 8, 14, and 17.
Hazard, John W., and Staff of *Changing Times, Success With Your Money*, Englewood Cliffs, N. J.: Prentice-Hall, 1956.

Jordan, David F., and Edward F. Willette, *Managing Personal Finances*, Englewood Cliffs, N. J.: Prentice-Hall, Revised Edition, 1945, Chapters 17, 18, 19, and 20.

Phillips, E. Bryant, *Consumer Economic Problems*, New York: Henry Holt and Company, 1957, Chapter 11, pp. 279-286 and 388-394.

Sauvain, Harry C., *Investment Management: A Guide for the Individual Investor*, Englewood Cliffs, N. J.: Prentice-Hall, 1953.

The Iowa State Bar Association pamphlets, 1101 Fleming Bldg., Des Moines 9, Iowa: *Do You Need a Will?* and *Joint Tenancy*.

U. S. Department of Labor, Woman's Bureau pamphlet, *What Social Security Means to Women*, 1957.

12

Life Insurance for the Family

WHY SHOULD A FAMILY INVEST IN LIFE INSURANCE? The primary purpose of life insurance is to provide economic protection against needs caused by disability, death, or old age. As such it furnishes a means of developing an estate for dependents in case of the death of the insured or a retirement income for an older person.

Life always carries uncertainties of many kinds, but in our twentieth century motorized and airborne transportation has increased our risks. Some form of economic protection built into the family's financial planning increases economic security in case of disaster, which in turn leads to emotional security and lessened tension in daily family living.

Through life insurance a man, particularly a young man with a wife and children, can usually provide his family with a larger estate in the event of his death than in any other way. For the average person to build up a \$10,000 or \$20,000 estate takes time; but by means of year-by-year life-insurance payments contracted for at a given rate, an individual or a family has a practical method for purchasing an estate. The estate may be in the form of what is known as a living estate (see page 242), or retirement income, or a death benefit.

The need for protection often comes at a time in the life cycle of the family when earnings are comparatively low and when the

best way to provide reasonable protection is through a well-chosen pattern of life insurance. Many fathers of teen-aged children, engaged in building up a clientele or practice, or buying a business or a farm, or employed on a salary have died before they could accumulate economic protection for the family. When, however, a life-insurance program has been planned and arranged as a first step, and often as the nucleus of an investment program, the life of these families has moved along relatively normally. On the death of the insured a sum of money is immediately available for meeting indebtedness for a college education for the children, or for a training or a refresher course for the mother, who must take over the responsibility for earning an income for herself and the children.

Even a modest life-insurance provision eases over a difficult period of adjustment, and a generous one, well-conceived and carried out, leaves a family in excellent financial position to face an unexpected loss of the husband and father.

Life insurance is really a form of group saving which transfers the burden of risk from one person or family to a business enterprise organized to carry the load. It is made possible because a large number of individuals wish to shift that burden. Through the sale of policies, life-insurance companies bring these individuals into a group, and the group then shares the losses of the individual.

Life-Insurance Premiums

The annual payment made to the insurance company for an insurance policy is called the premium. The amount paid will depend upon the type of policy chosen, the age of the insured, and the coverage given by the policy. Ordinarily, a premium covers three major items: (1) a small amount for the cost of selling the policy and for company operating costs; (2) an amount for the legal reserve which, with earnings on the reserve (about 2 to 2½ percent) is accumulated for the eventual payment of the policy; and (3) the insurance costs based on mortality experience. The last item will be higher for older policyholders than for younger ones because of their shorter life expectancy and hence the shorter time they will pay premiums.

Among reputable companies the premiums for a given kind of policy will not vary widely. Any wide variations will be occasioned by varying features in the policy itself.

Table of Mortality

Nearly a century ago the so-called "American Experience Table of Mortality" was derived from statistical analysis of mortality experience at that time. This table was used by life-insurance companies for computing the insurance rates charged at various ages until 1941, when it was replaced by a new table developed by the Association of State Insurance Commissioners. The new table, now in use, is known as "1941 Commissioners Standard Ordinary Table of Mortality" and is reproduced on page 268.

The Insurance Policy

The insurance policy is the written contract between the company and the person insured. So long as the insured pays the premiums when due, the company is legally obliged to fulfill the written agreement.

Reading and understanding an insurance policy is not an easy task for the lay person. In the main, a standard life-insurance policy gives the details (terms) of the contract with the company; that is, its face value, which is its value at date of maturity or at the death of the insured; the date issued and date of maturity; the name of the insured and the name of the beneficiary (the one to whom the face value of the policy is to be paid on the death of the insured or at the maturity of the policy); a table of the cash or surrender value of the policy at a given time; and any special features such as a disability provision.

Most states have regulations governing the insurance companies operating within their boundaries; and many have set up standard policies to which the companies have to conform. The policy holder is thus given a certain amount of protection against misleading representations; but nevertheless it behooves the insured to try to understand the content of the policy he contracts for and at least to be intelligent in the use of insurance terminology.

TABLE 11. 1941 COMMISSIONERS STANDARD ORDINARY TABLE
OF MORTALITY

Age	Deaths per 1,000	Expectation of Life, Years	Age	Deaths per 1,000	Expectation of Life, Years
1	5.77	62.76	51	13.27	20.64
2	4.14	62.12	52	14.30	19.91
3	3.38	61.37	53	15.43	19.19
4	2.99	60.58	54	16.65	18.48
5	2.76	59.76	55	17.98	17.78
6	2.61	58.92	56	19.43	17.10
7	2.47	58.08	57	21.00	16.43
8	2.31	57.22	58	22.71	15.77
9	2.12	56.35	59	24.57	15.13
10	1.97	55.47	60	26.59	14.50
11	1.91	54.58	61	28.78	13.88
12	1.92	53.68	62	31.18	13.27
13	1.98	52.78	63	33.79	12.69
14	2.07	51.89	64	36.58	12.11
15	2.15	50.99	65	39.64	11.55
16	2.19	50.10	66	42.96	11.01
17	2.25	49.21	67	46.56	10.48
18	2.30	48.32	68	50.46	9.97
19	2.37	47.63	69	54.70	9.47
20	2.43	46.54	70	59.30	8.99
21	2.51	45.66	71	64.27	8.52
22	2.59	44.77	72	69.66	8.08
23	2.68	43.88	73	75.50	7.64
24	2.77	43.00	74	81.81	7.23
25	2.88	42.12	75	88.64	6.82
26	2.99	41.24	76	96.02	6.44
27	3.11	40.36	77	103.99	6.07
28	3.25	39.49	78	112.59	5.72
29	3.40	38.61	79	121.86	5.38
30	3.56	37.74	80	131.85	5.06
31	3.73	36.88	81	142.60	4.75
32	3.92	36.01	82	154.16	4.46
33	4.12	35.15	83	166.57	4.18
34	4.35	34.29	84	179.88	3.91
35	4.59	33.44	85	194.13	3.66
36	4.86	32.59	86	209.37	3.42
37	5.15	31.75	87	225.63	3.19
38	5.46	30.91	88	243.00	2.98
39	5.81	30.08	89	261.44	2.77
40	6.18	29.25	90	280.99	2.58
41	6.59	28.43	91	301.73	2.39
42	7.03	27.62	92	323.64	2.21
43	7.51	26.81	93	346.66	2.03
44	8.04	26.01	94	371.00	1.84
45	8.61	25.21	95	396.21	1.63
46	9.23	24.41	96	447.19	1.37
47	9.91	23.65	97	548.26	1.08
48	10.64	22.88	98	724.67	0.78
49	11.45	22.12	99	1,000.00	0.50
50	12.32	21.37			

Choice of Company

As just stated, a life-insurance policy is a contract between an insurance company and the person insured. The company agrees to pay the full face of the policy at a definite time or upon the death of the insured. Such payment imposes a responsibility on the company for accumulating large funds with which to pay the claims as they fall due. In carrying the responsibility for amassing these funds, called underwriting, a life-insurance company fulfills an important function to the public. Handling the accumulated funds—caring for the cash funds and investing reserves in order to have necessary funds available when contracts are due—is another important function.

Anyone considering the purchase of life insurance will want to investigate the standing of the various prospective companies. He will first want to know what types of companies are represented in the group. Next he should know something of the size of the funds accumulated by each company, the age of the company, and the history of its operation. He will also need to know something of the company's investment policies and the nature of its investment assets.

Legal Reserve Companies

The legal reserve company is organized as a corporation under the laws of the state in which it originates and is required to maintain a reserve for the payment of its policies when due. The reserve is fixed by law. Each time a premium is paid by a policyholder, a certain percentage is required by law to be allocated to a reserve. The sum of this reserve fund and the interest it earns create the cash or loan value of the policy from year to year. The amount allocated to the reserve fund from each premium depends upon type of policy and rate, which has been calculated as indicated above from the basic mortality table.

Stock and Mutual Companies

Legal reserve life-insurance companies are of two types, stock and mutual. The names refer to the method of doing business and the sharing of the benefits of the enterprise. The stock com-

pany is owned by the shareholders and the profits that the company is able to make go to them, not to the policyholder. The mutual company is owned by the policyholders. After taking care of costs and setting aside certain necessary reserves, the profits go to the policyholder in the form of dividends.

The premium of the policy of the stock company is usually lower than the same type of policy in the mutual company because there is no stock capitalization in the mutual company to back up the claims of the policyholder. However, some of the stock companies issue participating policies. For these, the policyholder pays a higher premium than the nonparticipating. In reality this makes the premium cost of the mutual company which issues only participating policies and the stock company participating policy more comparable.

The dividends of the mutual company are returned to the policyholder if the mortality experience, earnings, and expenses are such that all the premiums are not needed. The rate is usually between 2 and 3 percent but cannot be determined in advance. Excluding government insurance, the mutual companies have about 65 percent of the life insurance in force in the United States.¹

Assessment Companies

The assessment company makes no provision for a reserve. It operates on the theory that a few die from a group each year and the need for the funds to be paid beneficiaries of deceased members will be met from current premiums. Annual premiums are not guaranteed but are computed each year to provide whatever funds may be needed to pay the benefits the company obligated itself to pay. The surviving members are assessed the amount of such premiums.

Assessment companies were established in this country in an effort to provide life insurance at a low cost. Low costs, however, are obtained only when the preponderance of a society's members are young. The higher the average age of the group, the more frequent the deaths and the higher the rates of assess-

¹ Elvin F. Donaldson, *Personal Finance*, New York: Ronald Press Company, Revised Edition, 1956, p. 214.

ments. The assessment company does not usually provide a satisfactory life-insurance program for a family, since its rates are low during the period when the insured has higher earning power and build up to a very heavy load during a time when earning power is likely to be decreased or does not exist.

Assessment companies do not operate upon the basis of mortality experience data, and none of the efforts to devise a plan to make equal assessments for all ages in the society have been based upon statistical analysis of experience. The result is that, as the importance of security has grown and developed in the history of life-insurance business, the assessment company has become less and less important.

Fraternal Companies

Fraternal insurance, as the term implies, is that offered by a fraternal organization to its membership. Until recently this type of insurance was not regulated by state insurance laws. This lack of regulation has resulted in certain difficulties and inadequacies.

Fraternal insurance dates back to the development of the guilds, and prior to that in England to older fraternal organizations called friendly societies. These were transplanted to the United States, and until the turn of the century fraternal insurance was based quite largely on the assessment principle rather than on a legal reserve.

More recently the trend in fraternal insurance has been to place it on an actuarial basis. This has come about both voluntarily and through legal action. Today, most reputable fraternal groups operate upon a legal reserve base, and the contracts may differ little from those offered by the life-insurance companies.

In those states where a reserve is not required by law and where fraternal insurance does not operate under standard requirements, care should be taken to investigate thoroughly the history and operation practice of any fraternal company from which one contemplates buying insurance. In some states the laws which apply to fraternal organizations have been so drawn as to make it possible for organizations purporting to be life-

insurance companies to qualify as fraternal organizations and operate without a state license. These unlicensed companies frequently offer the public cheap insurance contracts and thus prey upon the uninformed. Clauses are often inserted in the policies sold by these companies that reduce the benefits far below those expected and in many cases make collection of benefits difficult or impossible. Insurance sold at a price far below that established as fair and sound by reputable insurance companies operating under the supervision of adequate state laws is usually worthless.

Basis for Final Choice

The tests used in choosing an investment should also be applied in choosing the company from which to buy life insurance. One important test which applies particularly to life insurance is that the company shall have an established record of excellence in the operation of its business and a history of shared earnings. Information about the operation practices of a company, together with the size of its accumulated funds, can be

TYPICAL DISTRIBUTION OF ASSETS OF A LARGE INSURANCE COMPANY

Bonds	\$1,129,958,482
Industrial and public utility, U. S.	
Government, provincial, county,	
and municipal, and railroad	
Stocks, Preferred and Common	117,174,100
Mortgage Loans	643,692,201
First mortgages on real estate in 45	
states, the District of Columbia,	
and Canada	
Real Estate	52,626,270
Loans on Policies	69,081,179
Cash in Banks and Offices	14,103,040
Premiums	31,550,949
Interest and Rents Due and Accrued	16,640,621
Miscellaneous Assets	243,688
	<hr/>
Total Assets	\$2,075,070,530

obtained from the National Underwriters publications or from soliciting agents. The Underwriters reports are published annually, are readily available, and are easily understood. Upon a summary of such data from many companies a purchaser can judge the soundness of the company in which he is thinking of insuring.

On page 272 is part of the financial statement of a major life-insurance company, showing an interesting distribution of its assets. Following the statement the company offers to furnish a detailed list of the securities held by it to anyone who wishes to apply for it. Note the large proportion of assets in bonds.

Choice of Agent

The importance of the soliciting agent in the chain of contacts between the life-insurance company and the insured is often overlooked. The agent is the insured's source of information about insurance; he is the person from whom service is received during the period the insurance is in force and with whom all arrangements are made. The choice of that person from the standpoint of the insured is indeed important.

The agent who is most helpful to the buyer is one who comes to his client with a diagnostic approach. Such an agent views his clients' financial problems much as a physician views his patients' health problems. He will not push the client into a purchase which is unwise. He will not urge the client to make the purchase until all considerations have been thoroughly weighed and settled upon.

Purchasers who make it a rule never to sign a contract for insurance on the day the agent interviews them are less likely to regret their purchases, for they have time for an objective appraisal of all the factors involved and are not so likely to be overpersuaded by the agent to buy something they do not want.²

² Hazard, John W., and the Staff of *Changing Times, Success With Your Money*, Englewood Cliffs, N. J.: Prentice-Hall, 1956, p. 57.

Choice of Kind of Policy

✓
3723
11321
24
29

What kind of life-insurance policy an individual or a family should choose depends upon the investment needs of the buyer and his ability to pay for these needs. Four types of policies commonly purchased by families provide at least one of the features in long-time finance planning, that is, protection or investment. These policies are whole life, usually called *ordinary life*; *limited payment*, such as the "20 pay life"; *endowment*; and *term* insurance. In addition to these, certain more elaborate forms of insurance are to be had, such as *annuities* of various kinds and a combination policy, such as the *family income policy*.

Whole or Ordinary Life Policy

The ordinary life-insurance policy represents the least expensive permanent protection for the family offered by life-insurance companies. The contract carries the lowest cost premium of any permanent insurance, and the premiums are paid throughout the lifetime of the insured (see page 278). The price is fixed at the time the policy is purchased; it remains the same throughout the term of the contract, and the policy is in force as long as it is not allowed to lapse.

The premium rate for the ordinary life policy is based upon the Table of Mortality, and the policy is completely endowed by the time the holder reaches 99 years of age. Accordingly, most companies pay the full face value of the policy to the insured should he live to reach 99. On the other hand, should death occur before that age, the beneficiary is paid the full face value of the policy. The premium may be paid annually, semiannually, quarterly, or monthly. Paying annually costs the least because accounting costs are reduced to once-a-year billing and recording.

The ordinary life policy becomes the basic policy in most insurance plans for a family or for anyone with dependents, because it gives the maximum permanent protection for the smallest amount of money. Generally speaking, the ordinary life policy is the most widely sold and the least often changed or transferred.

Limited Payment Policy

The limited-payment policy is a derivative of the ordinary life policy. Both are designed primarily for the protection of dependents, and full payment is made on the death of the insured. The limited-pay life, however, carries a slightly higher premium because of the limited term of years of premium payment until the policy is paid up. The ordinary-life premium payments continue throughout life. The limited-pay life enables the insured to carry the financial load during higher-earning years when presumably he is more able to meet its cost. The premium-paying period runs for 10, 20, and 30 years, the most popular contract being the 20-pay life. The higher premium makes possible the limited-payment feature of the policy, with larger allocations to the reserve fund and thus an earlier self-endowment of the policy. Although the policy is paid up in the given number of years, its face value will not be paid until the death of the insured.

\ The choice between the ordinary life policy and the limited-payment policy is usually made upon the basis of the money available for savings. If the amount is restricted, the ordinary life may be preferable since a given amount of money will buy the maximum protection. The advantage of ordinary life is twofold: one is that, when death occurs early, not many premiums have been paid; the other is that with improvement in economic status an ordinary life policy can be converted into another type if desired. If the cost is not an important consideration, proper protection may be secured through the limited-payment policy and arrangement can be made for the end of the term to coincide with some such event as the date at which the income earner retires from service, thus relieving the premium burden in later years, yet protecting dependents.

Endowment Insurance

The endowment policy is a combination of a pure endowment, meaning a sum devised for use by the insured, and term insurance. With it the insured is protected for the full face value of the policy for the duration of the policy, and in the

event of death this face value is paid to the beneficiary. Should the insured live to the end of the term of years covered by the policy, the face value will be paid to him, although he has a choice as to the disposition of the funds: they can be left at interest, or converted into a part of a life income at a future date for the beneficiary, or they can be taken out in specified stipends through a period of time. The latter is the usual arrangement when the endowment has been purchased for a child to be used during the time of a college education. The fund is paid as directed through a period of training.

Thus we find here both the protection and the investment features. The term of years most popular with the endowment policy is 20 years, although 15-, 25-, or 30-year policies may be arranged. Obviously, the provisions of an endowment policy require larger premium payments than either ordinary life or limited-payment insurance (see page 278).

The endowment policy is useful if a particular future need, such as a college education, care of an aged parent, or some other large demand, requires liquid funds. The protective feature is not so much to provide for the dependent immediately in the event of the death of the insured as it is a means of having a fund for carrying out a project for which plans have been made.

Endowments are sometimes purchased when only protection is needed. It would be far better for the buyer to use available money for the purchase of larger amounts of ordinary life, thus having larger funds for the dependents in the event of his death, or else pay less for the same amount of protection. Experience of insurance companies shows that endowments are more frequently collected by the insured than by the dependent.

Term Insurance

Term insurance provides protection to the dependents of the insured for a specified period and is classed as temporary protection only and not an investment. Term policies are issued for a period of years, and, if death occurs within the contracted time, the full face value of the policy is paid to the beneficiary.

If death does not occur in the term of years, the insurer (the company) has no further obligation to the policyholder. Term insurance is the lowest-cost insurance an individual can obtain, usually amounting to about one-half the annual rate charged for an ordinary life policy (see page 278). The low premium indicates the limited coverage given by the policy.

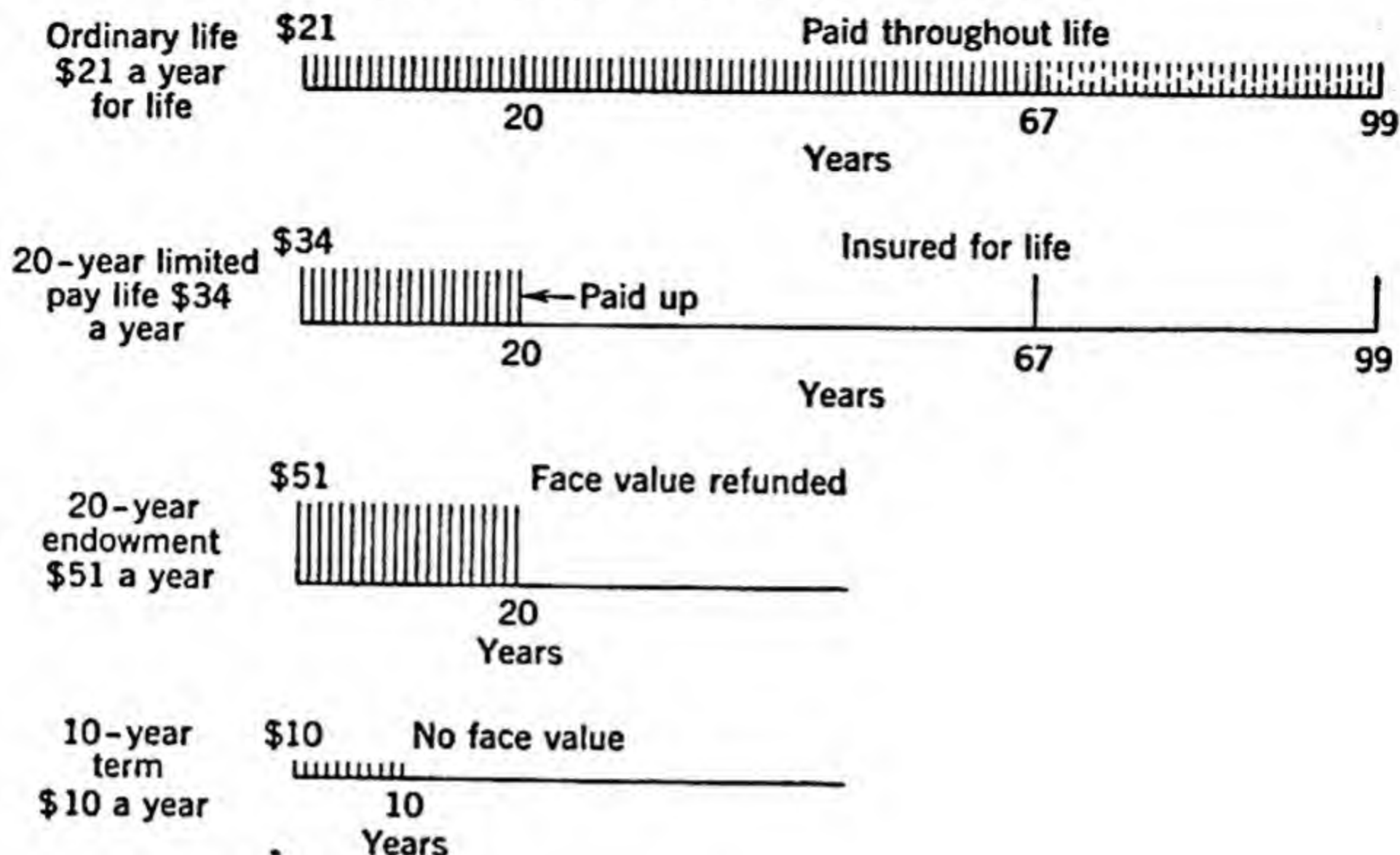
Term insurance is used to obtain the maximum amount of protection for a temporary need; it appeals to those who cannot afford to carry as much ordinary life as they might desire in order to protect their families. If, for example, a family with limited funds is buying a house on a cash and credit basis, and the father wishes to be assured of the family's ability in the event of his death to complete its ownership of the home, he can insure the indebtedness of the mortgage for the years of its extent. Term insurance gives him the cheapest protection that he can buy for this temporary need. The same method can be used by the farmer or small businessman to cover the value of a farm mortgage or a business indebtedness.

Still another use of term insurance in family finance is to provide maximum protection for a family of children during their growing years. The father who cannot afford to carry ordinary life insurance to cover the needs of the family adequately can carry part ordinary life and the remainder in the form of term insurance. During the term period he is able to secure twice the amount of protection for the same outlay of money. He assumes that at the end of the term the children can earn for themselves.

Comparative Costs

The diagram on page 278 presents a comparison of approximate costs of ordinary life, limited-pay life, endowment, and term policies. All are calculated for a 23-year-old person and are for \$1,000. The base line represents the life of the insured. Sixty-seven is the age expectation for the 23-year-old person.

COSTS OF FOUR DIFFERENT POLICIES

*Other Types of Insurance Policies***Annuity**

A type of insurance contract entered into by those who have more to invest is the *annuity*. This contract is written in a variety of forms and may carry different specific names from company to company, such as *guaranteed investment contracts* or *pension bonds*. (Annuity refers to a contract which provides that at a given time an income shall be paid to the person in monthly, quarterly, semiannual, or annual installments, in accordance with an agreement. The payments are made from a fund deposited by the insured as a lump sum or built up by him over a period of time.)

Of the wide variety of annuities purchased today probably the most common contract for those on a moderate income is the so-called deferred annuity. Under the deferred annuity contract the sum to be paid to the annuitant in the form of an income is deferred or paid later. The contract can be purchased with a lump sum deposit, as \$1,000 or \$10,000, with a specified deferred income program agreement; or it can be purchased by

yearly installments paid to the company for a given period of years. This contract calls for a repayment to the annuitant starting at a given age and date and progressing in a specified manner. For the salaried person, the annual deposit with a deferred income beginning at a stated age is a popular contract since it provides for a retirement estate with stated regular stipends.

Strictly speaking, the annuity is not life insurance, since it does not carry protection and has accumulated value but no face value. In the event of the death of the annuitant the fund accumulated, or the fund plus an interest accumulation, is paid to the beneficiary. If the annuitant dies after he has started receiving the income, the beneficiary may receive the residue of the fund, depending on the arrangement made by the insured.

Family Income Plan

The *family income plan* policy is a type of insurance estate based on the needs of the growing children in a family. It is a combination of ordinary life and decreasing term insurance. The policy is usually written to cover family needs in case of the disability or death of the father and is worked out to fit the needs of a particular family. The plan usually provides a higher income during the developmental years of the children and may be written so as to pay out the face amount in a still higher monthly income during years of increased need, as for a college education. It then decreases to a given base for the mother when the children are self-supporting, or she has the option of taking the residue of the face value of the policy in a lump sum if it has not been reduced by large expenditures for some need, as during the college years. If the fund has been reduced, she may still take the residue in a lump sum.

The family income plan policy can be characterized as "custom-built" insurance made to fit the needs of a given family. The protection afforded varies from company to company, and its cost will vary with the needs of the family.

Government Life Insurance

Veterans of World War I and World War II may obtain life insurance provided for the members of the armed forces by the United States Government.

Government life insurance was issued during World War I and can still be obtained by veterans of that war provided they are in good health. There are no restrictions on the beneficiary, and various methods of payment of the policy to the beneficiary are possible. A variety of policies are available and the veteran interested and eligible should investigate these possibilities.

National service life insurance is that provided by the government during World War II. All members of the armed forces of the United States who were in active service for more than 30 days prior to April 25, 1951 were eligible. Application for this insurance within 120 days from the date of entry into active service and 120 days after separation from service required no evidence of good health. After that terms the applicant had to give evidence of good health and have a medical examination.

Veterans who did not take out national service life insurance but who were in active service between October 8, 1940 and September 2, 1945 are still eligible for this insurance provided they can pass the medical examination. Any disability (short of total disability) connected with their service and resulting from, or aggravated by, active service between these dates will not bar applicants from obtaining new insurance provided application is submitted before the old policy terminates.

Servicemen's indemnity and insurance was made available after the outbreak of hostilities in Korea in 1950 for veterans of that conflict. In the main, this is pure insurance protection against premature death. For those wishing complete information about this insurance, application should be made to the Veterans Administration.³

³ Arthur W. Hanson and Jerome B. Cohen, *Personal Finance*, Homewood, Illinois: Richard D. Irwin, 1954, pp. 251, 252.

Life-Insurance Estates

Persons who wish to provide security for a family and are forced to do so from current income often establish what is known as an *insurance estate*. An insurance estate is the result of a diversified insurance program planned to cover a variety of needs and to obtain the maximum amount of protection for the money invested.

1

SUGGESTED LIFE-INSURANCE ESTATES WHERE \$75 TO \$100 CAN BE SAVED YEARLY

Type of Policy	Amount	Rate
(Estate A) Ordinary life	\$4,000	\$84
(Estate B) 20-year term *	\$8,000	\$80
(Estate C) Ordinary life	\$2,000	\$42
20-year term *	3,500	38
Total for Estate C	\$5,500	\$80

* The 20-year term can be used to cover an indebtedness, or provide funds for a college education for a child, or to increase family income by \$10 to \$100 a month.

2

SUGGESTED LIFE-INSURANCE ESTATE WHERE \$200 TO \$250 CAN BE SAVED YEARLY

Type of Policy	Amount	Rate
Ordinary life	\$ 1,000	\$ 21
20-year term *	2,000	22
Family income plan †	8,000	193
	<hr/>	<hr/>
	\$11,000	\$236

* The 20-year term can be used to cover an indebtedness, or provide funds for a college education for a child, or to increase family income by \$10 to \$100 a month.

† The family income policy can be written to return \$80 a month for a specified time, depending on the needs of the family, or the full face value of the policy will be paid to the beneficiary on the death of the insured.

SUGGESTED LIFE-INSURANCE ESTATE WHERE \$600 TO \$650 CAN BE SAVED YEARLY

Type of Policy	Amount	Rate
Ordinary life *	\$ 1,500	\$ 32
20-year endowment †	2,000	102
20-year term ‡	4,000	40
20-year term §	5,000	50
Family income and retirement policy	15,000	425
	<hr/> \$27,500	<hr/> \$649

* Clean-up fund.

† For education of child.

‡ To cover the mortgage.

§ To cover an indebtedness on the business.

|| Provides that in the event of the death of the insured, the beneficiary will receive a monthly income of \$150 for a specified time or will have the option of receiving the principal in the form of installments until it is exhausted; or a retirement stipend of \$150 a month will be paid the insured at age 65, or he may elect to take the face value of the policy in a lump sum.

Examples of the way in which a life-insurance estate can be developed at different levels of saving are given above and on page 281. These estates are suggestive only, and hold no particular value for a given family. They have all been calculated at the gross premium rates offered at age 23 on a participating basis. For age 30 the rate would be increased about \$4 per \$1,000, and for 35 it would be increased about \$8 per \$1,000.

Glossary of Life-Insurance Terms

Policy is the written contract or agreement between the insurer and the insured.

Face value is the sum for which the policy is written, and it is paid to the beneficiary upon the death of the insured.

Beneficiary is the person or persons named in the policy to receive the proceeds of the contract at the death of the insured or at maturity of the policy.

Premium is the yearly sum paid for the contract.

Reserve is the portion of each premium required by law to be set aside by the company to accumulate, giving rise to the fund which forms the basis for the repayment of the face value of the policy at its maturity.

Cash or loan value is the amount that can be realized on the policy at any time it is surrendered. The sum of the reserve year by year plus the earnings make up the cash value.

Mortality rate means death rate.

Loading refers to an overcharge made by the company to ensure safety which is added to the premium and is usually returned to the insured in the form of dividends.

Additional References

- Bigelow, Howard F., *Family Finance*, Philadelphia: J. B. Lippincott Company, Revised Edition, 1953.
- Cohen, Jerome B., and Bernard M. Baruch, *Decade of Decision*, New York: Institute of Life Insurance, 488 Madison Ave., 1958.
- Donaldson, Elvin F., *Personal Finance*, New York: Ronald Press Company, Revised Edition, 1956, Chapters 10, 11, and 12.
- Gordon, Leland J., *Economics for Consumers*, New York: American Book Company, Third Edition, 1953, Chapter 20.
- Hanson, Arthur W., and Jerome B. Cohen, *Personal Finance*, Homewood, Illinois: Richard D. Irwin, 1954, Chapters 7 and 8.
- Institute of Life Insurance, *Life Insurance Fact Book*, New York: 488 Madison Avenue.
- Institute of Life Insurance, 488 Madison Ave., New York 22, New York, Woman's Division pamphlets: *You and Your Family's Life Insurance*, *Life Insurance Facts for Business Women*.
- Jordan, David F., and Edward F. Willette, *Managing Personal Finances*, Englewood Cliffs, N. J.: Prentice-Hall, Revised Edition, 1945, Chapters 13 and 14.
- Miller, J. S., *Your Personal Insurance Guide*, New York: Simon and Schuster, 1955.
- Phillips, E. Bryant, *Consumer Economic Problems*, New York: Henry Holt and Company, 1957, pp. 395-409.

13

The Family Looks at Credit

CREDIT IS THE FINANCE METHOD of getting money, goods, or service in the present and paying for them in the future. In reality, it is a process of postponed payment, a privilege for which we have to pay and sometimes pay at a very high rate. At any given time the use of credit increases purchasing power and thus makes possible the provision of more goods or services than the cash on hand would allow. The family should understand the nature and operation of credit since repayment of the amount borrowed, together with interest for its use, must eventually be made. Credit can never take the place of income in personal and family finance, but it does have the power to alter the time when income will be spent.

The cost of credit and the legal power of the creditor to force repayment of indebtedness is not always realized or understood by users of credit.

Why Do Families Borrow?

Most families that borrow do so to meet needs or obligations. The needs may be real or imaginary. If the initial cost of a commodity seems too large to save before the purchase is made, some people will borrow in order to have the commodity immediately. Through the added purchasing power obtained by a loan, the cost of the good is spread over a longer period of payment and satisfactions are increased by having the use of the good during that period. The smooth working out of such use of credit assumes

that the credit load is light enough so that it will not cause tensions in the family during the repayment period. Many families who buy their houses on the amortized mortgage plan base their decision to do so on the above point of view. They have some cash, they borrow, they build, they have the satisfaction of ownership during payment. The house is an example of a good that has great durability and thus a long period of utility.

Although credit used for building is not consumer credit in the strict sense, it is a form of credit used by many families for satisfying their need for housing. Many families follow the same reasoning in deciding to use the installment method for the purchase of equipment or luxury goods. The excessive cost of satisfying a desire for a good that is less durable, or even has a high degree of perishability and is not essential, is a matter calling for careful consideration.

Often credit is used by a family to repay an accumulation of small debts or bills. Such an arrangement, it is argued, makes it possible to be indebted to one major agency rather than to a number of smaller creditors. This situation poses the question "How did you get this way?" quite as much as "What shall you do about it?" The decision to borrow for such a reason emphasizes the fact that the debt has to be paid whether it is in the form of bills or in a larger single loan.

Another reason for borrowing is to meet family emergencies. This reason can hardly be questioned. Such manipulation of resources is a part of the philosophy of family finance developed in the foregoing chapter on building a capital fund. So far as current money income allows, a capital fund is built partly for the purpose of meeting unexpected peak loads of expense. If these loads are anticipated and prepared for, the security of the group is strengthened. The self-supporting and self-sufficient family can always use credit in emergencies and do so with a feeling of confidence and self-respect.

Another group uses credit because the insistency of the want at the present time overshadows the dimly realized future responsibility to repay. This group borrows in order to possess more commodities than the income allows, such as fur coats, air conditioners in automobiles, and even unnecessary furniture.

Many families that manage their finances well use credit for the purchase of necessary commodities and profit therefrom. At the other extreme are the families that are caught in a ceaseless round of much getting into debt and little getting out. This is the family that "owes everybody in town!"

The Family's Use of Credit

Before using credit, the family should consider not only the satisfaction gained by the immediate possession of the goods but also the future adjustments to be imposed by repayment. Although credit increases purchasing power at any given moment, unless the purchase makes possible additional earning power, the final total purchasing power is not really increased but the time of payment is merely delayed.

For example, borrowing to purchase a television set, through either the installment plan or a loan granted for its purchase, will not increase the family's final total purchasing power unless through the loan the purchaser has been able to secure the item at a lower cash price than he would otherwise have had to pay. The purchase price must be lower than the loan plus interest on the loan or there is no saving. On the other hand, a typewriter which is to be used not only for personal service but also for earning may pay for itself plus the interest. Any earnings beyond its cost are really increased purchasing power. During the period of repayment, the amount borrowed for the typewriter is merely used for that purpose rather than for other needs. The decision to borrow in this instance is partly for increasing purchasing power and not for satisfaction alone.

The family that borrows for the purchase of a time- or a labor-saving device, on the other hand, reasons differently. *Real income* return from the services of the good, and not increased purchasing power, is the major consideration. The energy and time required of persons responsible for the given activity are here weighed against the use of this same energy and time released by the piece of equipment. At this point the issue is the alternative use of the released time and energy. Money is borrowed and used to save time or energy or both. If the time and energy released go into activities for personal or family life, then

there is a total service gain. If not, then the decision to make the purchase is on the basis of the satisfaction of the article rather than on the basis of increased real income.

Reasons for High Cost of Consumer Credit

A number of reasons are found for the high cost of consumer credit. First among them is that consumers usually want small loans, and the per-dollar cost to make and collect this type of loan is greater than for larger loans made for production purposes. The cost of investigation per loan is high, and the cost of collection is high, an expensive person-to-person method of collection sometimes being required. The bookkeeping, accounting cost, notices, etc., are a large item in the consumer-credit transaction because the loan is usually liquidated in small amounts through a long period of time.

Another reason for the high cost of consumer credit is the risk factor due to losses. Even though the amount of the loan per individual is small, there are innumerable individual loans and in the aggregate the losses may amount to an appreciable sum. The risk factor is particularly great for lending agencies not requiring collateral or cosigners.

A third cause of high cost of credit is that borrowers will pay it, *not realizing how high a rate they are being charged.*¹ The dollar cost is what interests them. As a result, with a high demand for consumer credit, lenders do not publish rates unless required to do so by law. Even then, they do not always do so in a manner to be easily understood.

Basis of Credit

Fundamentally, credit is based upon human conduct or behavior, that is, on a person's character, on his interest in his obligation to pay or repay, plus his ability to pay. His ability to pay and his interest in repayment determine the resultant faith, or confidence, which the lender has in him. Credit is built upon confidence.

¹ Adrian Rondileau, *Education for Installment Buying*, New York: Teachers College Press, Columbia University, 1944.

Biglow names four C's that usually determine the amount of credit an individual can secure: Character, Capacity, Collateral, and Capital.² The last three make up the *ability to pay*, discussed above. A fifth C can be added: that is the Confidence which the lender reposes in the borrower as a result of the degree to which the borrower possesses the four basic C's. Thus an array of six C's may be shown as follows:

$$\left. \begin{array}{l} \text{Character} \\ \text{Capacity} \\ \text{Collateral} \\ \text{Capital} \end{array} \right\} \text{Confidence} \rightarrow \text{Credit}$$

A more refined schematic presentation would be:

$$\left. \begin{array}{l} 1. \text{Character of man's business or occupation} \\ \quad (\text{His ability to pay}) \\ \quad + \\ 2. \text{Character of man} \\ \quad (\text{His interest in repayment}) \end{array} \right\} \text{Confidence} \rightarrow \text{Credit}$$

Family credit is based on the character of the man and his wife and on the quality of family financial behavior. The interest of the family members in paying their obligations and their joint efforts in doing so in large part determine the amount of credit they should attempt to secure. Such cooperative effort is notably exemplified by the attitude of the farm family where wife and children help the farmer meet debt obligations. Agents of the farm-management associations report that the attitude of the family is an important factor in the progress of the farm enterprise and in the liquidation of farm indebtedness.

The family's ability to repay is further dependent on the capital fund which it has been able to accumulate, on the family's earning power, and on the managerial ability of the woman in the home. Following is a schematic presentation of a basis for family credit:

$$\left. \begin{array}{l} 1. \text{Character of family leaders (Interest in repayment)} \\ \quad + \\ 2. \text{Character of } \left\{ \begin{array}{l} \text{occupational return} \\ \text{managerial ability} \\ \text{capital accumulation} \end{array} \right\} (\text{Ability to pay}) \end{array} \right\} \text{Confidence} \rightarrow \text{Credit}$$

² Howard F. Bigelow, *Family Finance*, *op. cit.*, p. 370.

If either part of these two factors breaks down, confidence is lessened and credit for the group is affected. Obviously, a family strong in both interest in repayment and ability to pay will have little difficulty in securing credit on excellent terms.

Limitation in a Family's Use of Credit

How much credit can a family use and yet live comfortably and progressively? The accompanying series of figures (page 290) will help each family to visualize its own limitations in credit use.

Figures 23 and 24 show the base for credit and the limitation to its expansion. One can readily see that if an increasing credit load is superimposed on a base that does not change, as in Figure 24, or changes only a little, or if anything should happen to cause the lender to withdraw his confidence, entirely or in part, insolvency could result. Reduced confidence would so weaken the base that the superstructure would be top-heavy and would collapse.

Figure 25 shows how two families with like occupational return (salary or wage) can have quite different superstructures of credit. Family *a* can carry a larger credit load than *b* because of *a*'s superior character and hence the greater confidence it commands. Family *a*, with the larger credit load, will remain solvent, whereas *b*, with a smaller load, may or may not. Either the managerial ability of members of family *a*, or its capital accumulation, or the character of the individuals is the probable reason for the larger section of confidence which supports the larger allowance of credit.

The family that habitually allows its superstructure of credit to extend to the limits allowed by its base structure is in danger of insolvency. The family that keeps its credit superstructure in easy and comfortable relation to the base will be the self-sufficient family with sustained solvency despite its debt load.

The foregoing analysis will help a family answer the question *how much* credit it can afford, but it does not answer the questions *when* credit obligations can be assumed or *to what extent* the use of credit is justified. Whether the family should borrow, and whether it is a good thing for the group, are matters that each family must decide on each occasion of borrowing.

Figure 23. The solid square is a base representing the three aspects of a family's ability to pay. The dotted section represents the *confidence* of the lender as the outgrowth of the family's ability to pay plus its character. The true base, then, is the sum of the two.

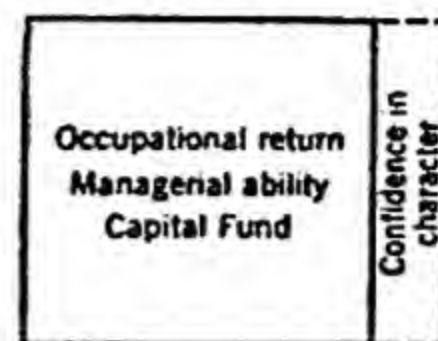


Figure 24. The base is identical with Figure 23. With the solid square plus confidence as a complete base, a series of superstructures has been raised which represent credit or increased purchasing power at the moment. The dotted lines radiating from the base represent credit expansion. They can be extended only so long as the base will carry the superstructure.

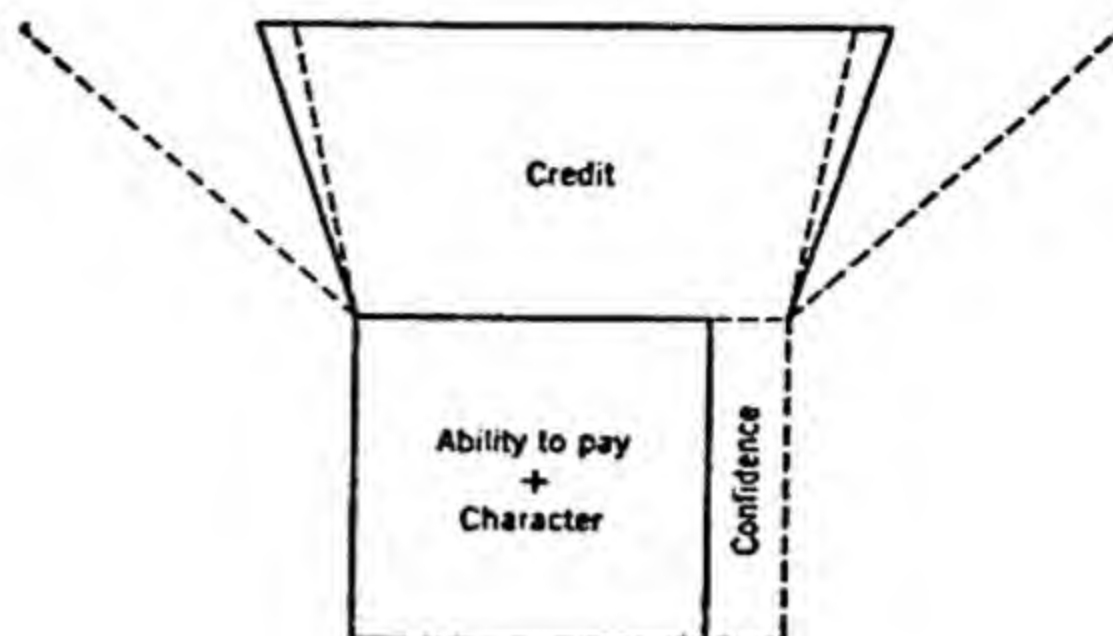
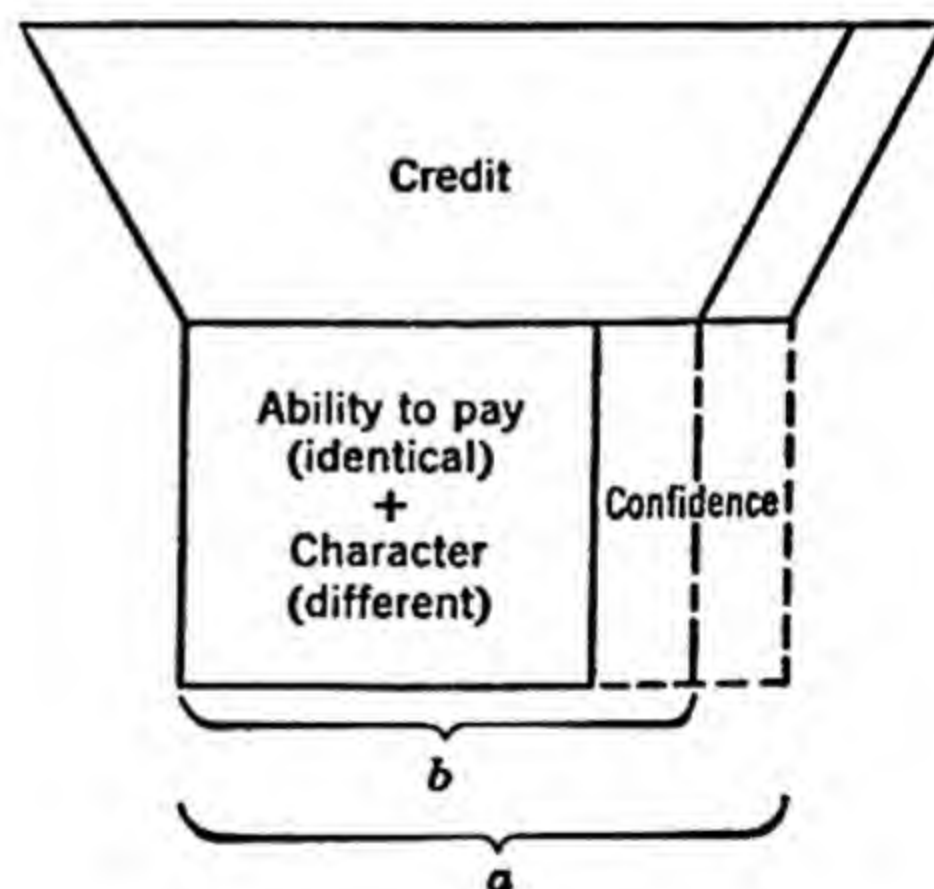


Figure 25. The solid square representing the ability to pay is identical for two families; but character, evidenced by interest in repayment, varies. The larger dotted area shows the greater confidence enjoyed by the first family (*a*), and thus its greater credit base; the smaller area set off by the broken line shows the confidence area of the other family (*b*), with its smaller base for a superstructure of credit.



Some Guides to the Use of Credit

There are certain questions that a family can pose for itself which, if answered honestly and realistically, can guide in making an intelligent decision about the use of credit. Such questions are:

All credit is an added cost; exactly what is the cost we plan to assume?

Does the use of the credit add a needed and essential utility or satisfaction, or is it merely something that is desired?

Will the cost of the credit mean something will have to be given up in order to carry the credit?

Is an essential being given up for a nonessential?

If the credit is a long-time commitment, what deprivations might the family have to shoulder in the future in order to carry the credit load on a reduced income?

What is the present business situation, and what is the probable business outlook throughout the term of the contract?

Can the family justify assuming the credit load?

Kinds of Credit Entering Into Family Finance

The credit commonly having some place in family finance may be classified according to use into three major kinds: (1) investment credit, (2) commercial credit, and (3) consumer credit.

Investment credit represents long-term credit, usually for the development of large-scale projects of industry. It enters into family finance, as the name implies, as a form of income-yielding property or investment for the family capital fund. The two major examples are the family's purchase of bonds, which are loans to going enterprises—government or industrial—and mortgages, which are loans made on real estate. Mortgages also enter as part of the financing of home ownership in providing housing for the family.³

Commercial credit is a form of short-term credit used in financing small business enterprises or the movements of goods between manufacturer and retailer. Such credit is used for concerns with relatively short periods of turnover of goods. Commercial credit enters into family finance indirectly as it affects the price paid for commodities purchased.

Consumer credit is that used for the purchase of commodities and services for satisfying wants as they occur day by day. It enters directly into family finance. It is the type of indebtedness most frequently used and requires careful planning to be liquidated so that eventual insolvency will not occur.

³ For fuller discussion of these two credit instruments, see page 294.

Legal Credit Instruments a Family Should Understand

A credit instrument is a legal document drawn up by the lender and signed by the borrower, which indicates the terms of the credit transaction. Since some instrument is signed for every transaction which is legal, regardless of the source of credit, the typical ones should be understood. Five credit instruments commonly enter into personal and family finance: the promissory note, the collateral note, the installment sales contract, the bond, and the mortgage. All are easy to understand, with the possible exception of the installment sales contract.

The Promissory Note

The promissory note is the credit instrument used in a loan secured by signatures only. It represents an unconditional promise to pay to a certain individual or organization a certain amount of money (or its equivalent) on a certain date, at a specified rate of interest. The promissory note may be secured by one name, the borrower only; or by two or three names, the borrower and one or two cosigners. All signers are equally liable under the law for the full value of the note. If the borrower is unable to pay, each or either of the cosigners is responsible for payment and can be forced to pay within the limits of his salable assets.

The promissory note is ordinarily a 60- or 90-day note and can be renewed as often as the lender is willing to allow renewal.

The Collateral Note

The collateral note is the credit instrument used in making a loan which is backed by a tangible asset such as a security; that is, a bond, or a certificate of shares, or a note receivable. The collateral note is a promise to pay a certain person or organization a given sum of money by a given date at a given rate of interest, and it is signed by the borrower. The collateral is listed on the note with a statement that, if the note is not paid by the date specified, the lender has the legal right to sell the collateral at the best price he can secure at the time for the purpose of paying

the loan. A sum large enough to cover the cost of sale of the security will be recorded on the note. The note will also state that this sum, together with the face value of the note, will be deducted to liquidate the loan, and the remainder of the amount received from sale of the security will be returned to the borrower. Such a note requires only the signature of the borrower.

If the amount of the loan is a small fraction or a reasonable proportion of the value of the collateral, the risk is lessened and the interest rate charged the borrower should be lower than for a one-, two-, or three-name promissory note. This note may be renewed as often as the lender is willing.

Installment Sales Contract

The installment sales contract is a powerful credit instrument, but it is difficult to make a blanket statement covering its contents. The central feature of an installment agreement is that, during the term of the agreement, the seller retains possession of the article and the buyer has the use of it. In fact, installment sale and purchase are much like renting the use of a product while it is being paid for. Mazur says, "The 'hire-purchase' plan of England corresponds to our device of installment purchase."⁴ The difference is mainly that in England the plan has been used largely as a device for giving credit when there is a real necessity on the part of the purchaser for the product; while in our economy, for some time at least, it has been used as an aggressive selling device by those who wish to push the sale of consumer goods.⁵

The seller may also have control over the buyer's source of income through a conditional sales contract, a chattel mortgage, or a wage assignment.⁶ The *Consumers' Guide* says this about installment contracts: "Contracts are drawn by sellers' attorneys. Buyers usually are in complete ignorance of what legal right they do have. And buyers, especially of automobiles, who think they drive a shrewd bargain on trade-in price, often accept other terms that victimize them without a second glance at the contract.

^{4, 5} Paul M. Mazur, *Consumer Credit in an Expanding Economy*. Proceedings of The National Consumer Credit Conference, 1955. Chapel Hill, N. C., p. 13.

⁶ Margaret Reid, *Consumers and the Market*, New York: F. S. Crofts and Company, Revised Edition, 1942, Chapter 18.

That is why consumers have sometimes found hard times come with easy payment.”⁷

The family that makes a purchase involving the outlay of an appreciable amount of money would do well to have a contract lawyer read the contract before they sign. The extra cost involved may save much stress and worry at a later date and may pay for itself many times over.

The Bond as a Credit Instrument

A bond, although entering into family finance as an investment, is nevertheless a credit instrument. A bond is literally a loan to an established enterprise, industry, or to the government, and as such it registers a credit transaction. It is secured by the pledge of the real property of the enterprise. The face of the bond registers its face value, or denomination. Further details recorded are the date the bond matures, the interest rate, and the time of payment of interest. Some bonds have coupons attached for redeeming interest on each payment date. The coupons are clipped by the owner of the bond and sent to the company issuing the bond.

Real Estate and Chattel Mortgages

Mortgages are of two kinds, real estate and chattel; both are credit instruments recording loan transactions. The real estate mortgage is a loan secured by a pledge of real property, and as such it gives a full listing of the property used as security, the amount of the loan, the interest rate and date the interest is due, and the duration and maturity date of the mortgage. The real estate mortgage is secured by a deed to the property deposited with the mortgage in the folio of the lender. A discussion of types of real estate mortgages is found in the section on the financing of home ownership, pages 353 and 354.

The chattel mortgage is a loan secured by a pledge of movable or immovable property other than real estate, sometimes spoken of as “goods and effects.” The mortgage records full information of the chattels pledged, the amount of the loan, interest rate,

⁷ “Look Before You Sign,” *Consumers' Guide*, Vol. 5, No. 18 (February 27, 1939), p. 10.

maturity date, and any other details that are pertinent to the transaction. Thus a diamond ring, an automobile, or any other salable equipment may be security for a chattel mortgage.

Sources of Consumer Credit for Family Use

Because the pressure of urgent need is usually upon a family before the decision to borrow is made, the choice of the source of credit is sometimes hasty and unwise. There is little investigation of available credit sources, often with disastrous results. Many a family has lost property used as security; wages have been assigned by the creditor to collect overdue indebtedness; or available salable products have been taken for sale to make payments on the loan.

Consumer credit services that families have access to regardless of the size of the local community are discussed on the following pages. It remains the responsibility of each family to canvass its own community, make comparisons of the sources of credit, and choose the one that will best fit its needs.

Need for Investigating Sources of Consumer Credit

Since consumer credit is expensive and the risk involved in its use may be quite real, the importance of investigating various sources of credit when credit is needed cannot be overemphasized. In purchasing such tangible goods as a suit or a coat, one shops around in trying to get a dollar's worth for a dollar spent. It is worthwhile to do the same when purchasing credit, that is, shop around for the best buy.

Among those offering consumer credit to individuals and families are many with different charges for credit and different standards of business ethics and tactics. The sale of consumer credit has indeed entered the realm of high-pressure promotion. There are many reliable agencies, but the most widely advertised ones may be those that attempt to lure borrowers by high-pressure methods. Unfortunately, the borrower's desire for extreme privacy in the transaction makes it possible for an unscrupulous lender to charge higher rates and make harsher terms than he otherwise could or would, for the borrower is often willing to

pay any charge and accept any terms in order to maintain privacy.

In addition to the high cost of consumer credit, the terms of the credit are often a jumble of percentages added; percentages deducted; percentages applied to cash prices, or to original unpaid balances, or to declining unpaid balances; special charges for investigation, insurance, registration, and what not. The full import of the charge and collection methods of a loan must be fully understood if one is to be protected against terms that will prove unduly difficult or disastrous.

Although the cheapest way to buy goods is to save and pay cash, there are few families that do not at some time need credit services for some purpose. Speaking of the need for credit services in a community, Foster says: "The ideal is a full loan service on a business basis for every self-supporting family that needs it. As long as the purpose is constructive, the cost not unduly high, and the payments within the ability of the borrower, a loan is as well justified in the case of a \$15 a week clerk as a \$50 a week machinist. Indeed, those who seek the smallest loans are often in direst need. But costs rise rapidly as the size of the loan decreases."⁸

Commercial Bank Credit

The ordinary commercial bank is organized primarily to give commercial credit and not to make consumer loans. However, most local banks offer credit, as well as other services, to non-commercial customers who have security or have established the ability to pay through their earning power.

Commercial banks offer three types of consumer loans as a part of their regular credit service to customers. The first enables a customer to borrow on tangible security with a collateral note and is usually the cheapest form of credit for the family. The possibility of securing this kind of less-expensive credit is one good reason why a family or a person should build a capital fund, small or large, that can be used when there is need for more cash than is readily available.

The second type of consumer loan is that secured by a promis-

⁸ LeBaron R. Foster, *Credit for Consumers*, Public Affairs Committee Pamphlet 5, Revised Edition, 1945, p. 14.

sory note carrying the signature of the borrower. In certain cases the bank will require one or more cosigners as additional security. This is a short-term loan and ranks second in cost to the collateral loan.

The two above types of loan require a bank connection. They are made on the basis of the current rate of interest, usually 4 to 7 percent, and run for 60 to 90 days with renewal privilege. Sometimes arrangements for a longer term can be made, although the bank usually prefers a shorter term with renewal.

The third form of consumer loan offered by banks are the loans made by their personal-loan departments. Such a department operates under the general banking laws. Rates on personal loans are quoted as discounts. This means that the interest is collected at the time the money is borrowed. The method of repayment is in small installments of a given amount (\$6 to \$8) a month, until the loan is repaid. With this type of loan the borrower is paying interest on the entire amount borrowed throughout the repayment period, instead of upon the unpaid balance. Such a procedure results in a higher rate of interest even though computed at a lower discount rate. In addition to the interest, fees and fines for late payments often increase the cost of the loan. Usually, the actual rate of interest is between 12 and 18 percent.

Even though the rate of interest is higher than on a customer's collateral loan, the service of the personal-loan department of a reputable bank provides one of the more economical sources of consumer credit. To some people the disadvantage of the service is the requirement that such loans be secured by signatures of two or three cosigners. Since many families prefer either privacy in their credit operations or independence from responsibility to others, they usually choose to pay a higher rate asked by other lenders than to be under obligation to cosigners.

Industrial Bank Credit

The industrial bank, of which the Morris Plan Bank is the best known, is another source of credit for consumers and small businesses. All industrial banks require cosigners for loans granted and make the cosigner as responsible as the borrower for repay-

ment of the loan. Occasionally, loans are made on chattel mortgages or promissory notes. The rate of the industrial bank loan is also quoted as a discount. The cost of the loan is higher than the commercial rate, but usually not so high as the cost of installment buying. The rate is comparable to that charged by the personal-loan departments of commercial banks since it is computed in approximately the same way.

Industrial banks check closely on delinquencies and exact fees for delayed payments, often putting legal machinery of collection into operation if payments are overdue for even a short time.

✓ Life-Insurance-Policy Loans

Every life-insurance policy carries a *cash* value, which is also the *surrender* or *loan* value. The amount of this value at any given time depends on how long the policy has been in force. Recorded on the policy, usually in table form, will be found exactly the *cash* or *loan* value for each year the policy has been in force.

A loan on a life-insurance policy resembles closely a bank collateral loan in that it is made on the basis of tangible security—the policy. The loan value represents the fund built up by the policy holder in advance of his obtaining the loan. It is in reality the sum of that portion of each premium which the company is required by law to place in reserve for the eventual repayment of the policy when it becomes due. Since this fund stands as a credit to the policy holder, the rate of interest on a policy-secured loan is relatively low, usually 6 percent, and there is no time limit required for repayment.

Although the policy loan is a possible source of credit, insurance companies tend to discourage customers' borrowing on policies for other than emergencies since borrowing jeopardizes the protective feature of the insurance. In event of the death of the insured during the time there is a loan on the policy, the beneficiary is paid only what is left after the amount of the loan plus any unpaid interest is deducted from the face of the policy.

Small-Loan or Personal-Finance Companies

Still another source of consumer credit is the small-loan or personal-finance company, which in volume of loans represents one of the largest single sources of consumer credit. The term "small" is used because the loan is limited in size. The interest rate is high, but is quoted at 2, 2½, or 3 percent unless the agency is required by state law to be more specific. To the uninformed this interest rate sounds low. The true meaning of the quotation, however, is 2, 2½, or 3 percent *per month*, which makes a rate of 24 to 42 percent per year if payment is on the total sum borrowed, but slightly lower if on the unpaid balance.

The small-loan companies operate in most urban centers and lend money to anybody above the relief level. They are characterized by their vigorous advertising methods, which usually include the sending of quantities of material to address lists of salaried persons. Thirty-three states⁹ operate under uniform small-loan laws patterned after the Russell Sage Uniform Small-Loan Law; 11 operate under restrictive small-loan laws of varying effectiveness; and 4—Arkansas, Montana, North Dakota, and South Carolina—have no small-loan laws of any kind. The uniform law restricts the loan to \$300 and the interest rate from 3½ down to 2 percent per month on the unpaid balance. Although the upper limit is \$300, most loans are for less than \$100. In states where there are no restrictive laws or where the laws are too restrictive, this type of credit agency lends itself to many abuses in business methods and ethics and in advertising.

The intelligent user of this kind of credit will not only make a thorough investigation of available agencies and costs but will also investigate the habits and practices of the loan company he expects to use.

⁹ Arizona, California, Colorado, Connecticut, Florida, Idaho, Illinois, Indiana, Iowa, Kansas, Kentucky, Louisiana, Maine, Maryland, Massachusetts, Michigan, Minnesota, Missouri, Nebraska, New Hampshire, New Jersey, New Mexico, New York, Ohio, Oregon, Pennsylvania, Rhode Island, Utah, Vermont, Virginia, Washington, West Virginia, and Wisconsin.

Credit Unions

Another source of credit for consumers and one which is growing in importance is the credit union, which is both a savings and a loan cooperative. Credit unions are usually, and most successfully, organized among a group of people of similar interests who know each other and who work together. It is a voluntary organization operating under a legal charter. The loans are made only to group members and are made from the savings of the group. Thus the credit union represents a pure type of cooperative enterprise.

Credit unions are under the regulation of federal and state laws. Some states provide a credit union commissioner who aids in the organization of the unions and who inspects and enforces regulations set up by the laws of the state. As few as 7 may organize a union, but 40 or 50 are needed to provide sufficient capital to make operations really helpful to members.

The laws of organization usually provide that a member may own as many shares as his financial condition will allow, but each member may have only one vote. Some unions have a limit to the number of shares one person can own. Small loans up to \$400 are made to members with no collateral, on only the borrower's signature. For larger loans the borrower must have either collateral or cosigners unless he has stock equal to the loan. The advantage of the lending aspect of the union for the member is the relatively low interest rate. The rate is rarely above 1 percent a month on the actual unpaid balance of the loan. The rate may go as low as $\frac{1}{2}$ of 1 percent a month. No fees are permitted except fines for delinquency in meeting payments. At the usual 1 percent a month, the interest rate is 12 percent a year.

Costs can be low because the management of the credit union is in the hands of its members. The treasurer is usually the only bonded officer; the rest of the service is given by members acting as officials and as committee members. There is usually a supervising committee of three members and a credit committee that passes on loans. Often the office space and clerical services are donated by a member. There is little cost of investigation of

borrowers since the membership is a rather closely knit group. Thus the credit union is a thrift and lending agency for its members, for one must save something in order to be able to borrow from this source.

The federally chartered credit unions of the country have been exceedingly successful since their organization in 1934; they have a very low rate of loss. Credit unions are running a top race in volume of consumer credit. Although they serve a relatively small part of the people with credit needs—about 7,000,000 people in 1956—they are an answer to the problems of many who have little or no property but high character qualifications for credit.

Personal and Family Loans

Person-to-person and family loans should be mentioned in connection with sources of consumer credit. If the lender is known to the borrower, loans are usually available at reasonable cost. Unlicensed lenders, when the persons involved in the transaction are strangers, are likely to charge excessively high interest. The volume of credit in the form of personal and family loans is unquestionably large. Statements of amounts can be only estimates.

Any discussion of family credit as a part of financing a family should mention the universally lax business methods current in credit operations among family members. Many times families make family loans with no record of the transaction by note or statement. Family debts and credit arrangements should be recorded legally in the same way as any outside credit operation in order to avoid grave injustices which otherwise can and often do arise. Good business acumen is as important among family members and friends as in a transaction with a merchant or banker. Record family loans to family members!

The Family's Use of Store Credit

The most widely used source of credit by families in their day-by-day activities and operations is *store credit* or *book credit*. Store credit is of two kinds: charge accounts or open-book ac-

counts, in reality 30-day credit, and installment buying or time accounts. The latter are often given impressive titles, such as "The Budget Plan," "The Deferred Payment Plan," or some similar name.

Charge Accounts

Charging articles purchased with once-a-month payment is now such an accepted part of the American way of life that many people do not realize that their open accounts on retail dealers' books lead the credit list for consumption use. So much is the charge account used as a convenience that we overlook the fact that every time we charge an item at a store we are asking for a bit of credit. Since no bill for credit accompanies the monthly statement, we are not aware of the added cost. Nevertheless, the cost is there and is included in the price we pay for the goods purchased.

The customer who operates with charge accounts not only buys the good but also borrows the price of the good until the bill is paid. Usually the time of payment is the tenth of the month following the purchase of the goods, but many stores do not enforce the regulation strictly and accounts may be allowed to run for 60 to 90 days. Certain types of stores, notably department, furniture, and grocery stores, are more lenient than others in allowing accounts to stand.

Leniency in credit extended to customers in open-book accounts frequently causes family bills to pile up and is an important reason for need for further credit. Certain service organizations, however, that render their bills once a month, cut off their service if payment is delinquent. On the other hand, they give a discount if the bill is paid on or before the tenth of the month. Public utilities—that is, gas, electricity, and telephone services—usually operate under such a credit arrangement.

In some localities, by action of the local credit association,¹⁰ a small percentage of an unpaid charge account, usually 1 to 2

¹⁰ A local credit association in a community is a joint organization of dealers offering credit of all kinds. This organization works for uniformity of credit operation in the community and also takes over certain policy formation, collection, and investigational responsibilities for its members.

percent, is added to the next month's account if payment has not been made within 30 days after the bill is rendered.

Although the advantages of charge accounts are obvious, the disadvantages should also be recognized. What is a convenience to the family that charges is a cost without commensurate service to the one that pays cash in a store with one price. A major disadvantage for the family that uses the charge account is that the charging may get out of hand and result in indebtedness beyond ability to pay. For those who cannot exercise restraint, a cash-payment plan is usually the wisest. For those who, by intelligent planning and personal stamina, can control their expenditures, the charge account is a great convenience and its use entirely justifiable.

Installment Buying or Time Accounts

Purchasing by the installment method is the second form of store credit. Installment buying means getting the use of but not the title to the goods in the present and paying for this use in small installments through a stated period of time. At the end of the payment period legal possession of the goods is transferred to the buyer. The question as to who owns the goods during the period of payment is frequently overlooked by the buyer, and great surprise is often evidenced when, on delinquency of payments, the true owner repossesses the goods.

The general economic and ethical aspects of installment buying will not be discussed here. As a method of purchase and a source of consumer credit, it ranks as one of the chief sources of consumer credit, being second only to open accounts. It has long been available for the purchase of nearly everything from cribs to coffins, to which can now be added airplane tickets and a complete vacation trip to Europe. Not every store sells on time to every customer; but so many kinds of merchandise offered at such widely varying prices sell on easy payment plans and diverse carrying charges that most families can find some dealer who is glad to sell to them on a time basis.

Family Use of Installment Credit

How shall a family determine whether or not to use the installment method of purchase as a source of credit in its finance management? First, if financial resources are to be approached in a rational manner, the family must face facts as they are. Three questions must be considered in connection with any purchase for which cash on hand is insufficient. Shall the family save and pay cash, and thus await the possession of the good? Shall they have the good in the present and borrow to make a cash payment? Shall they have the good in the present and use some form of mercantile credit?

The intelligent decision must be based on a comparison of costs of the various methods of financing the purchase. Obviously, the cheapest method is to save and pay cash. But if the family wishes to have the use of the good before cash purchase is possible, then the use of credit is the only answer. What then? Again, *face facts*. Which is the cheaper: to borrow and pay cash or to use the installment method? This decision will be based upon cost in extra dollars added to the purchase price and cost in *interest rate*. Since credit is usually purchased on the basis of rate of interest, a comparison of rates of various available sources is an intelligent approach.

While it may be possible eventually to arrive at the cost in terms of interest rate when borrowing from a lending agency, such information is almost impossible to obtain for installment buying. Sellers say openly that the buyer is not interested in interest rates; all, they say, the buyer wants to know is how much more the good will cost in dollars. The cost of installment schedules as they are drawn up is most difficult to calculate. Often the credit terms are unnecessarily complex, confusing, and deceiving to the customer. The studies which have been made on the cost of installment selling show wide variation in quoted interest and the actual interest charged on installment sales, and a wide variation from a fair rate to a rate entirely out of reason.

How can a family find facts about credit cost? If the family decides to use the installment method, it should shop around to find the best buy in terms of *rate*. There are certain types

of information which a buyer can rightfully demand of the seller and which he should insist upon having. Most important is the true difference between the *cash price* and the *installment price*. Any buyer who does not demand that much information is indeed foolish! Even though the seller declines to give the interest rate (and many salespersons on the floors honestly do not know and thus *cannot* give the rate), any buyer, with knowledge of the cash price, installment price, down payment, and monthly payments, can figure an interest rate for any month. This may not prove to be the exact rate but will at least be a minimum, and having that knowledge will be better than buying blindly.

A simple example will serve to illustrate how a buyer can calculate at least the minimum rate for his installment purchase.

CALCULATION OF INTEREST RATE ON AN INSTALLMENT PURCHASE OF A BREAKFAST TABLE

\$30 cash	}	= \$3.00 carrying charge			
\$33 installment					
\$3 down		= \$	30	balance 1st month	
\$5 per month		=	25	" 2nd "	
			20	" 3rd "	
			15	" 4th "	
			10	" 5th "	
			5	" 6th "	

Total borrowed = \$105 through the 6 months

Average amount borrowed per month	$\$105 \div 6 = \17.50
Average carrying charge per month	$\$3 \div 6 = \$.50$
Interest rate per month	$\$.50 \div \$17.50 = 2.86\%$
Interest rate for 6 months	$2.86\% \times 6 = 17.16\%$
Interest rate for a year	$17.16 \times 2 = 34.32\%$

Problem check:

Per month interest	$\$30 \times 2.86\% = \$.858$
	$25 \times 2.86\% = .714$
	$20 \times 2.86\% = .572$
	$15 \times 2.86\% = .428$
	$10 \times 2.86\% = .286$
	$5 \times 2.86\% = .142$
Total carrying charge	<hr/> = \$3.000

The item is a breakfast table offered for sale by a department store for \$30 cash, \$33 on time, \$3 down and \$5 a month until the debt is liquidated. This is the *essential information*. Never make an installment purchase or sign an installment contract with less!

The rate of interest for this breakfast table can be calculated more rapidly and with a fair degree of accuracy by using the constant-ratio formula:

$$R = \frac{2Mi}{P(n+1)}$$

where

- R = the annual effective rate charged
- M = number of payment periods in a year
- i = carrying charge in dollars
- P = credit given (net balance of the loan)
- n = number of payments to be made

Substituting the data on the purchase of the breakfast table used in the problem above, we have:

$$R = \frac{2 \times 12 \times 3}{30(6+1)} = \frac{72}{210} = 34.28\%$$

This rate, 34.28 percent, is thus approximately the same as the 34.32 percent obtained by direct calculation.

Time or Budget Payment Plans

A further excursion into installment costs is made in Table 12, which shows the time payment plan of a mail-order house. The table illustrates a practice in installment selling that has grown up with the so-called "Budget Plan" or "Easy Payment Plan" in many stores and mail-order houses. Under this arrangement the buyer simply selects what he wants to buy, adds the cost to an already established "Budget Account," takes the goods and continues his once-a-month payment. Note the conspicuous absence of *the time the indebtedness is to be paid* in this table. There is an obscure mention of 8 months in an "unless" clause on the last line of the small print below the table. This, however, does not fix a specified length of time in which the bill is to be paid but refers to a change in charge to be made.

TABLE 12. TIME PAYMENT PLAN OF A MAIL-ORDER HOUSE

Table of Terms

For All Merchandise except Household Appliances and orders over \$300.

If Unpaid Balance Is	We Will Add for Carrying Charge	Monthly Payment	If Unpaid Balance Is	We Will Add for Carrying Charge	Monthly Payment
\$10.01 to \$12.50	\$1.25	\$5.00	90.01 to 95.00	9.50	9.00
12.51 to 15.00	1.50		95.01 to 100.00	10.00	
15.01 to 17.50	1.75		100.01 to 110.00	11.00	
17.51 to 22.00	2.00		110.01 to 120.00	12.00	10.00
22.01 to 24.00	2.25		120.01 to 130.00	13.00	
24.01 to 26.00	2.50		130.01 to 140.00	14.00	
26.01 to 28.00	2.75		140.01 to 150.00	15.00	11.00
28.01 to 30.00	3.00		150.01 to 160.00	16.00	
30.01 to 33.00	3.25		160.01 to 170.00	17.00	12.00
33.01 to 36.00	3.50		170.01 to 180.00	18.00	
36.01 to 40.00	4.00		180.01 to 190.00	19.00	13.00
40.01 to 45.00	4.50		190.01 to 200.00	20.00	
45.01 to 50.00	5.00	6.00	200.01 to 210.00	21.00	14.00
50.01 to 55.00	5.50		210.01 to 220.00	22.00	
55.01 to 60.00	6.00	7.00	220.01 to 230.00	23.00	15.00
60.01 to 65.00	6.50		230.01 to 240.00	25.00	
65.01 to 70.00	7.00	8.00	240.01 to 250.00	26.00	16.00
70.01 to 75.00	7.50		250.01 to 260.00	27.00	
75.01 to 80.00	8.00	8.00	260.01 to 270.00	28.00	17.00
80.01 to 85.00	8.50		270.01 to 280.00	29.00	
85.01 to 90.00	9.00		280.01 to 290.00	30.00	18.00
			290.01 to 300.00	31.00	19.00

ON ADD-ON ORDERS your monthly payment rate will be the amount required by the above table for your new combined balance. Monthly payment will not be increased unless above table requires a higher monthly payment. Exception: Monthly payment will be increased a minimum of \$1.00 for each add-on consisting principally of clothing or other non-durable items, unless your present monthly payment will pay new balance in 8 months or less.

True, the buyer could decide the length of time he wants to pay the total amount and in this way could compute an interest rate. Few, however, will do this. The usual consumer using this method of paying for purchases will pay out to the bitter end with no knowledge of the rate charged and little or no interest

in finding out. Whyte calls this the "opiate of budgetary purchasing."¹¹

Why are families willing to pay such high rates of interest on installment credit. First, they are unaware that they are paying high rates; second, the payment, whether it is easy or not, *seems easy*. One frequently hears the statement, "We just do not miss the \$10 each month," which means the satisfaction of possession outweighs the dissatisfaction of enforced monthly payment. In all probability such a family has resources that would enable it to carry this credit load. But what about the families that are "loaded to the limit" or the families with so few resources that credit is almost impossible to get? Such families are the prey of dealers whose business tactics are ethically questionable. They are the families that suffer from unsavory methods of repossession of goods, wage assignments, bad contracts, and exorbitant interest rates, and the ones that need protection through socially adequate regulation of consumer credit.

One caution should be given. *Never* add a second purchase to a previous installment contract; *always demand a new and separate contract*. The former practice lends itself to wide abuse, such as the addition of the new purchase price to the original cost of the previous purchase instead of to its unpaid balance.

Questions to Answer About Installment Buying

The family that plans to use installment credit will find it worthwhile to consider the following questions before entering into an installment credit agreement. The first set of questions helps to establish the actual cost and obligations of the credit.

What will the credit actually cost me in money? What rate of interest is charged?

Are all the dollars and cents figures on the contract correct?

Are there any blank spaces to be filled in later?

What are the insurance charges, if any? What insurance is actually provided?

To whom will I owe the payments?

¹¹ William H. Whyte, Jr., "The Opiate of Monthly Payments," *Fortune*, May 1956.

What penalty charges may be imposed for late payment? Are there any extra charges?

Do I have a right to fair notice before the merchandise can be repossessed? What repossession charges may be collected?

What security have I given? Does the security include other merchandise previously bought? Does it include a wage assignment?

What legal safeguards and guarantees have I waived?

Do terms in fine print commit one to additional obligations?

Is there provision for a fair refund in carrying charges if early payment is made? ¹²

The second set of questions is concerned with the finances of the individual family, as they determine for that family the advantage or disadvantage of installment buying.

Is the use of our total income planned well enough to include adding a monthly payment obligation? Do we really live on a planned economy?

Is our income regular enough to allow assuming a monthly payment obligation?

Is the purchase a durable good? Is not purchasing perishable goods on installment risky?

Since other living costs must go on, is the amount we are pledging to pay out of sane proportion to our ability to meet the obligation?

Can we make a relatively large down payment and pay the remainder off rapidly, since that is the cheapest way to buy on the installment method?

Are there any restrictive federal or state laws that bear upon consumer credit transactions? (During certain periods of economic maladjustment, such as war or inflation periods, consumer credit is sometimes controlled by federal law.)

Consumer attitudes toward installment buying were made the subject of a study by the Board of Governors of the Federal Reserve System in early 1954.¹³ The results, summarized on page 310, indicate that more than one-third of those questioned (37 percent) had come to the conclusion that the practice was bad or bad with some qualifications; half thought it good or good with qualifications.

¹² "Look Before You Sign," *Consumers' Guide*, Vol. 5, No. 18 (February 27, 1939), p. 13.

¹³ "Consumer Installment Credit: Growth and Import," Part I, Volume I, Table 31, p. 106, Board of Governors of the Federal Reserve System, 1957.

Opinion	Percent So Indicating
Good idea	31
Good, with qualifications	19
Sometimes good, sometimes bad	9
Bad, with qualifications	12
Bad idea	25
No opinion	1
Opinion not ascertained	3

Ranking of Sources of Consumer Credit According to Cost

A general ranking of credit agencies according to the rates charged for consumer credit will be of help to those families who find it necessary or wise to seek credit services. Rates vary from one section of the country to another and from time to time during changes in economic conditions; but a comparative picture of what to expect is shown in the following summary taken from Public Affairs Pamphlet 5:

RATES ON CONSUMER CREDIT *

	Common Charge, Percent	Range of Charges, Percent
Savings bank accounts	—	3- 6
Building and loan association shares	6	6- 12
Insurance policies	5	3- 6
Credit unions	12	6- 12
Personal loan departments of banks	—	6- 18
Remedial loan associations (pledges)	—	9- 36
Remedial loan associations (chattel mortgages and co-maker notes)	—	15- 30
Industrial banks	15	12- 24
Pawnshops	36	24- 120
Small loan companies	36	18- 42
Installment sellers and finance companies	—	0- 500
Illegal lenders	240	42-1200

* LeBaron R. Foster, *Credit for Consumers*, Public Affairs Committee pamphlet 5, 1942, p. 20.

As pointed out earlier, good business practice in family finance requires a thorough analysis of the best method of meeting emergencies, accumulated indebtedness, or acquisition of consumer goods. If these cannot be met from cash, savings, or sale of assets, it then behooves the family who must have credit for such purposes to make comparisons of all available types of consumer credit and to choose the source that offers the best buy at the cheapest rate. Besides the rate, one must consider also which source carries the least hazard of extras, of fees, penalties, or wage or salary assignments, or the possibility of repossession of the goods by the seller.

Whether the loan is large or small, the responsibility for investigating the full range of sources of credit lies with each family that aspires to good business procedure in its finance management.

Additional References

- Bigelow, Howard F., *Family Finance*, Philadelphia: J. B. Lippincott Company, 1953, Chapter 18.
- Consumer Credit in An Expanding Economy*, Chapel Hill, N. C.: Proceedings of The National Consumer Credit Conference, School of Business Administration, University of North Carolina, 1955.
- Donaldson, Elvin F., *Personal Finance*, New York: Ronald Press Company, Second Edition, 1956, Chapters 2 and 3.
- Foster, LeBaron R., *Credit for Consumers*, Public Affairs Committee pamphlet 5, Revised Edition, 1945, pp. 1-30.
- Hanson, Arthur W., and Jerome B. Cohen, *Personal Finance*, Homewood, Illinois: Richard D. Irwin, 1954, Chapters 3 and 6.
- Holmes, Emma and Minnie Belle McIntosh, "Consumer Installment Credit—Patterns of Use and Costs," *Journal of Home Economics*, Vol. 52 (February, 1960), 95-98.
- Phelps, C. W., *Using Installment Credit*, Studies in Consumer Credit, No. 4, Baltimore: Commercial Credit Company, 1955, pp. 70-80.
- Phillips, E. Bryant, *Consumer Economic Problems*, New York: Henry Holt and Company, 1957, Chapter 8.
- Reid, Margaret, *Consumers in the Market*, New York: F. S. Crofts and Company, Revised Edition, 1942, Chapters 18 and 19.
- Stewart, Maxwell S., *Credit Unions—The People's Bank*, Public Affairs Committee pamphlet 50, Revised Edition, 1944.
- Using Consumer Credit*, National Education Association, Washington, D. C., 1947.

14

Records as an Aid in Family Finance

WHY SHOULD A FAMILY KEEP RECORDS? In our present-day exchange economy, the financing of a family is an involved and complicated process. Practically all goods and services must be paid for in money, and a multitude of small expenditures must be made. Under these circumstances memory cannot be relied on to supply usable records. Since a number of people are usually dependent on one stream of family income, some system of recording expenditures and other financial operations is necessary if all are to share fairly in the use of family resources and if there is to be accurate information on which plans and controls can be intelligently executed. Even simple records consistently and carefully kept will help to ease the process of financing a family. They are also valuable in making out income-tax returns and in the adjusting of insurance claims.

Why, then, do so many people dislike to keep records? Probably because there is a certain repetitiveness and insistency about record keeping that is irritating to them. This is because they have not reduced the process to a habit, or they fail to see the records as valuable tools for realizing their desires or the desires of the family and not as an end in themselves. Furthermore, the benefits from keeping records may not be so immediately apparent as are those from most other repetitive activities. Food

planning and preparation, for example, are motivated by hunger; cleaning, by the desire for orderly surroundings; activities that further the social life of the group may be motivated by the desire for social prestige or pleasure. Motivation for record keeping is not so insistent or strong.

But assuming that homemakers are convinced of the advantages of keeping records, what is the basis for choosing the kind of records they will want to keep? As indicated above, the basis for this choice should be the desire to obtain significant facts about how the family's income is being used. With this knowledge, adjustments in expenditures can then be made that will enable the family to have more nearly what it needs and wants. Remember that the more revealing the records are, the more rapidly and ably can judgments be based on them and the more smoothly can needed changes be effected.

It must also be remembered that a set of records that is entirely satisfactory for one family may not be so for another. A family whose guiding members are naturally careful and meticulous is likely to desire more detailed records than another family in which those responsible for the records tend to be irritated by detail and will seek only ways of finding the minimum information on which to base their judgments.

What Records Aid in Family Finance

Specifically, then, what records give reliable information for finance management and yet do not take too much time in the keeping? The answer is part of an earlier analysis of income management; namely, those records that will *supply basic information both in the long-time and in the short-time view of income use.*

Long-time records concern items of a permanent nature, such as property owned, other investments, and all indebtedness. These records should be as complete and adequate as possible. A record showing these assets and liabilities is here called *the ledger*. Derived from the ledger is another important long-time record—the *balance sheet*, or *net-worth sheet*, in which liabilities

are balanced against assets at stated intervals. This sheet is computed at least once a year, but can be calculated oftener if desired.

The essential short-time records are those showing the expenditure of realized income in terms of money, or cash expenditure, and in terms of real income where goods form an appreciable part of the realized income. These records are called the *household accounts*.

All three types of records—the ledger, the balance sheet, and the household accounts—will be discussed briefly.

The Family Ledger as a Permanent Record

The family ledger is a permanent record of all properties and debts of the family. It should include full data for the identification of all assets and also full data on all indebtedness. A book of some size and permanence of materials is desirable for this record, which is an entirely separate record from the current household expenditure accounts. For the family with a large amount of property or with considerable variety in types of property and debt transactions, the book will need to be large enough for some kind of organization. For a family of more modest means and thus fewer transactions, a page for each type of transaction will be enough.

Let us consider a family living on an income of \$400 a month, \$4,800 a year, in conservative circumstances, with assets and debts as follows:

Assets

1. A house in which the family lives, purchase price \$9,000.
2. Two life-insurance policies:
 - 1 ordinary life policy for \$3,000.
 - 1 twenty-year endowment for \$2,000 for college education of two children.
3. A real-estate first-mortgage receivable for \$500.
4. One note receivable for \$75, a loan to a sister.
5. Social security record.

Liabilities

1. An amortized¹ mortgage for \$7,000 on the house.

¹ For explanation of amortized mortgage, see pages 353 and 354.

2. A loan of \$250 on the ordinary life policy for an emergency operation.
3. The purchase of a mechanical refrigerator on time for \$375.

What information would the ledger of this family contain?

As a minimum, five sheets would be needed—three for the assets, using one for each type of asset, and two sheets for the debts, one called a capital account sheet giving the detail table of amortization of the loan on the house, the other for the installment debt.

The *capital account sheet* for the house would contain the necessary data of ownership; that is, the value of the house at date of purchase, with whom the loan is held, the date the loan is due, and the amount of the contracted amortized payments and what these cover. Together with these items would be recorded any additions to the property which would increase its value, such as a porch or 15 feet of additional land for the lot. At any time, then, the family can cast up the value of the property, which will be the original cost of the property plus any additional input minus a fair depreciation. The complete data recorded make full information available in case of forced sale or necessary settlement of the estate due to death or any other exigency, and become the basis for a part of the income-tax computation.

The *life-insurance account* would record the data of each policy, that is, the number of the policy and the company in which it is held, maturity date and value, time and amount of premium payment, and a table of cash or loan value year by year which gives the exact surrender value at any time.

The *mortgage-receivable account* would record all pertinent data incident to the \$500 mortgage, that is, name of mortgagee, total amount of the loan, maturity date, contract interest and date of its payment, plus any payments on the principal.²

The *notes-receivable account* would record the name of the borrower, the amount of the note, and contract interest, date of interest payment, and any payments on the principal.

The *liability or debt account* for the family under discussion is relatively small. Since there is an amortized building-and-loan

² Interest payments are not recorded here since they are part of the current income.

mortgage, it will be well to have one sheet for the recording of the complete table of the computed increasing principal and decreasing interest amounts per payment.³ Having such a table makes it possible at any time to know the exact amount of the unpaid principal.

One sheet will be sufficient for the other types of loans. Since there is no maturity date on the *life-insurance loan* of \$250, the recordings will be the interest rate, the date of interest payment, and any repayments on the principal. The life-insurance company allows the policyholder to liquidate a policy loan on payments as small as \$5 at a time.

The time-payment arrangement for the refrigerator is a form of *accounts payable* and should be fully recorded,⁴ as should any other store or service account, either past due or being liquidated on time. The date of the purchase, the name of the company or person owed, the total amount of the account, the interest rate, and all payments made on the account should be included. When records are thus kept, the indebtedness remaining in any account can be known at any time.

Other types of assets and liabilities commonly a part of a family's financial arrangements, but not included in the accounts of the family cited above, will be discussed here briefly.

In the account of assets there might be a *cash surplus* in the form of cash reserves set aside in some place not easily accessible but available for emergencies or for known large expenditures. Such a surplus might be deducted from the checking account or kept in a saving account, either bank or postal.

Securities, including stocks and bonds, are other important assets frequently found in the family's investment account. The ledger should record all important data of each individual security.

Accounts receivable is still another type of asset, particularly important in the finances of the family of the professional man, such as the doctor, farmer, lawyer, or any person carrying open

³ The lending agency will furnish such a table to any client.

⁴ The problem of cost and the need for understanding payment arrangements before the contract is signed are discussed in connection with installment purchasing (see pages 303-306).

accounts for sale of services or goods to clients, patients, or customers. These accounts should be carefully recorded and documented in the ledger in order that the family may make proper collections in the event of the death of the family earner.

Finally, in the ledger account of assets is the *inventory of household and personal property*. These items are tangible assets and should be recognized as such, but they are difficult to evaluate with any degree of accuracy after time has passed.

The interest in keeping ledger accounts and in balancing assets and liabilities is often jeopardized by an unjustified fear of the work entailed in making up a household inventory. The question whether to value the items at their original purchase price or at their resale value as used goods is often argued. A simple solution, accurate enough for this group of assets, is the following: Turn a part of the ledger into a permanent inventory of personal and household goods; record only relatively durable goods. Keep this inventory a growing one for a few years, say three or five,⁶ and then at these intervals figure a blanket depreciation on the total value of the inventory. To calculate depreciation on individual items is difficult, discouraging, and unnecessary.

The ledger account of liabilities might also contain items of indebtedness not represented by the debts of our case family. *Notes payable*, one such kind of item, are loans secured by notes. The recording in the ledger should give complete data on each individual loan. Among *accounts payable* might be *accumulated and unpaid interest or taxes*. Ordinarily these items are a part of the current expense of a family, but for some reason acceptable to the lender they may have been allowed to accrue and become past-due. They then become an indebtedness as legal of collection as a bank note and should be recorded in the ledger account of liabilities until the indebtedness is paid.

The Net-Worth or Balance Sheet

The net-worth or balance sheet is merely a careful computation and summary of the value of all assets and of the value of all indebtedness arranged to show the two values balanced against

⁶ Of course, if the family belongs to a group keeping records for analysis by an outside agency, it will use the same period as used by the others.

each other. It is thus both a process and a record. It helps both in short-time and in long-time planning. On page 243 the development of a family capital fund was discussed as an integral part of the savings and investment planning of the family. If the net worth of the family is computed year by year and recorded in a sequence of years (see Table 13), the family will be in position to know exactly how its capital fund stands, not only actually but also as to any increase or decrease. The figures will answer the question, "How well are we doing?" If the net worth turns out to be a minus quantity, we say the family is insolvent, or "in the red."

For our purpose the analysis will be clearer if we examine a computed net-worth sheet for the family whose ledger account we have just discussed. In Table 13 note for 1959 the array of both assets and liabilities as taken from the ledger account. The sheet is balanced first on January 1, 1959, for the year 1958; on

**TABLE 13. NET-WORTH SHEET OF CASE-STUDY FAMILY MADE
JANUARY 1, 1959, 1960, AND 1961**

	1959	1960	1961	1962	1963
Assets					
Cash on hand in checking account	\$ 125.00	\$ 275.00	\$ 150.00		
Value of house	9,000.00	8,850.00	9,350.00 *		
Cash value of two life-insurance policies	300.00	315.00	330.00		
	275.00	290.00	310.00		
Mortgage receivable	500.00	500.00			
Notes receivable	75.00	75.00	50.00		
Total assets	\$ 10,275.00	\$ 10,305.00	\$ 10,190.00		
Liabilities					
Mortgage (building and loan)	\$ 7,000.00	\$ 6,650.00	\$ 6,400.00		
Loan on life insurance	250.00	200.00	150.00		
Accounts payable	375.50	75.50	65.00		
Total liabilities	\$ 7,625.50	\$ 6,925.50	\$ 6,615.00		
Balancing assets and liabilities	\$ 10,275.00 - 7,625.50	\$ 10,305.00 - 6,925.50	\$ 10,190.00 - 6,615.00		
Net worth	\$ 2,649.50	\$ 3,379.50	\$ 3,575.00		
Changes in net worth		\$ 730.00	\$ 195.50		

* \$500 from mortgage receivable put into new porch on house.

January 1, 1960, for 1959, etc. For the years not yet at hand, it has been necessary to make a few assumptions of what the financial values will probably be.

The inventory value of household goods has not been included on this sheet, for it is assumed that it has been kept separate, as suggested in the discussion of household inventories, page 317. If the value of such an inventory had been added to the net-worth sheet, the procedure would be to add new purchases year by year to the inventory account until the year for deduction of depreciation arrived. That year the deduction would be made and the inventory value would be decreased just that much, just as the evaluation of any other asset might be reduced.

The importance of the net-worth calculation cannot be overstated from the point of view of its supplying vital data for family financing. In fact, many would say that it is the most important single financial record for the family, since it gives basic information at least once a year on the economic status of the group.

Another simple type of sheet for calculating personal or family worth at any given date is shown on page 320. Here the important questions, "What do we own?" and "What do we owe?" are answered by recording items under the appropriate headings. This way of reviewing one's financial situation can be used with or without the help of a permanent ledger, though a well-kept ledger account adds both to the ease and the accuracy of such a statement.

Records of Current Money Expenditures

The records of current cash expenditures from money income, commonly called *personal* or *household accounts*, are the most repetitive of the three types of records deemed essential to give data for family finance planning. It is the recording against which there is the greatest amount of resistance because of lack of motivation. Kyrk suggests approaching the recording of expenditures as a financial history of the family.⁶ Such an approach would be a form of motivation which might be interesting and

⁶ Kyrk, *op. cit.*, pp. 411-415.

WHAT IS OUR FAMILY'S FINANCIAL SITUATION?*

What Do We Own?	January 1, 19__	What Do We Owe?	January 1, 19__
Bank savings	\$_____	Mortgages on real estate	\$_____
Postal savings	_____	Other mortgages and notes	_____
Balance in checking account	_____	Amount borrowed on life in-	_____
Cash on hand	_____	surance	_____
Life insurance—cash value	_____	Unpaid installments	_____
Stocks, bonds, etc.	_____	Accounts	_____
Mortgages, notes, accounts	_____	Groceries	_____
due family	_____	Medical care	_____
Real estate, other than farm-	_____	Other	_____
operated	_____		_____
Clothing—estimated value	_____		_____
Jewelry—estimated value	_____		_____
House furnishings and equip-	_____		_____
ment	_____		_____
Land only, owned and oper-	_____		_____
ated	_____		_____
Dwelling	_____		_____
Other buildings, fences, etc.	_____		_____
Land improvements	_____		_____
Horses	_____		_____
Cattle	_____		_____
Hogs	_____		_____
Sheep	_____		_____
Poultry	_____		_____
Crops, seed, feed	_____		_____
Machinery, equipment	_____		_____
Automobile	_____		_____
	=====		=====
	\$		\$

* By permission of Mrs. Ruth Crawford Freeman, Home Economist, University of Illinois Home Economics Extension Service, Illinois Family Account Project.

real enough to convince the family of the genuine worth of accounts. Memory cannot be relied upon for giving accurate information about many small repetitive expenditures, although it might be accurate for large expenses such as rent, insurance premiums, or even the cost of a coat or suit of clothes.

Account-keeping can quite honestly be approached with full knowledge that different kinds of recording will be done at different times and stages in the family cycle. There are periods in family life when the control of outgo, and thus knowledge of expenditures, is very important because there is either already a heavy demand upon income by a number of people or there is a growing demand due to changing conditions in the group. Accurate data are likely to be greatly needed when conditions are uncertain. On the other hand, after the family situation is quite well under control, the rigor of accounting can be slackened. Thus you will hear a homemaker say, "I used to keep accurate, detailed accounts, but I don't any more." Which is to say that the pattern of expenditure is so well established and so well in mind that only brief recordings concerning changes are needed to do the job well.

The Accounting Process

What are the simplest recordings that might be made and yet constitute a household account? At least four gross items would need to be included: income, taxes, savings, and total expenses. If a family wishes more adequate information, the expenditure section can be expanded to cover a breakdown, or classification, of expenses: food, clothing, recreation, etc. Furthermore, some families may not spend money for rent; then that item would not appear. Others might have all food furnished, and that item would be omitted. Because of varying kinds of expenditures the organization of account items should be adapted to each family if a family is to have the information it needs for planning.

The fact that accounting is an individual family affair cannot be stressed too strongly. Unless a family is keeping accounts along with a group of other families⁷ from which comparisons are being made, the decision of what to record and how to record it remains entirely within the family. So long as the recordings give the financial history of the family, and thus the facts needed for adjustments, the "how" is a matter of personal preference. One family greatly simplified some of its accounting by having

⁷ In farm management associations and some extension programs, for example, account books are sent to a central point for summary, analysis, and comparison.

a column called a "once-a-month" column, where items such as telephone, gas, power, rent, and monthly payments on an air conditioner were entered. Any arrangement a family can devise to expedite recording, to make it an habitual performance, and add reality and interest to the task is desirable. *Habit* and *motivation* are the two greatest aids to account-keeping.

The yearly plan and companion account form for recording expenditures given on pages 324 and 325 show how simple, yet adequate, a finance system can be. The sheets have been used by and adapted to a number of families with considerable success and satisfaction.

Choosing an Accounting System

Criteria for Evaluating a System

A system of accounting for the family can be evaluated by four easily understood criteria: *simplicity*, *adequacy*, *flexibility*, and *convenience*. If all four criteria are fulfilled, then the detailed and repetitive nature of account-keeping is reduced, incentive to keep the accounts is stronger, and interest can be sustained.

Simplicity is a characteristic of prime importance in home accounts. One of the major difficulties encountered by those who work with families in finance management is that the heat of first enthusiasm may lead the homemaker or family to be overly ambitious and to choose a system which has not been developed for her family or which is so elaborate that even a cost accountant would have difficulty with it. Simplicity here is a virtue often overlooked, and at the outset of account-keeping it is essential if performance is to be sustained. Simple recording does not demand large blocks of time but makes use of slack moments when other time-consuming tasks are in progress. A simple system of organization of items, coupled with a form easy to handle, can be comfortably integrated into daily routine.

The *adequacy* of a system is determined by how well it fits the needs of the group, and thus gives basic information. Ordinarily, adequacy is not the result of chance but is reached only after considerable thought has been given to the family needs and ways

of spending. It is the result of revamping and experimenting. The system is not adequate unless it tells the facts one needs to know. If it tells more than is necessary, it may become too cumbersome.

In the experimentation which leads to determining the adequacy of a system of accounts, the characteristic most needed is *flexibility*. Where to put a new set of expenses that shows up for a brief period and then is no longer in the list is often a difficult question to decide. The possibility of adjusting the system to requirements of changing circumstances or conditions, that elasticity which we crave in human endeavor, is a quality much needed in account-keeping.

In accounting, *convenience* refers both to ease in recording and to ease in getting at and taking care of the system. If accounting is made a family project in which the children are allowed to help, both in recording items as purchased and with the arithmetic involved, convenience of form is particularly important. A system which is not easily kept all together would hamper such group participation. For instance, a card-file system, although it may be flexible and adequate, would be difficult for children to work with.

Accounting Systems in Current Use

At least four types of accounting systems are in current use. These—the sheet, envelope, notebook, and card-file system—are briefly evaluated on the following pages.

Records of expenditures may be kept on a single, double, or multiple (four-fold) sheet. This method is *simple* and *flexible*. Since the sheet can be tacked on the back of the bread board, the end of the cabinet, or the back of a door, with a pencil hanging nearby, it is *convenient*. Its *adequacy*, however, is questionable. Naturally, the double or multiple sheet is better than the single, though if the single sheet is well worked out it may be large enough to give essential data.

Two types of envelope systems are currently used. One, really a cash payment system, consists of dividing the money into amounts previously planned, and placing the money for each group of items into separate envelopes to be dispensed as the

need arrives. Such a system brings planning and accounting close together. The system as described is frequently used by people who receive their income weekly and who operate almost entirely on a cash method of payment. For the group operating on small means, the system is direct and simple, highly flexible, adequate, and convenient if money for change is anticipated and supplied. For the family operating on higher incomes payable in monthly or irregular installments, keeping such a large amount of money in cash might prove unsafe and inconvenient.

The second envelope type is a pure sheet accounting system. A large manila envelope, either single or double, is used. Into it all bills, slips, notations, and memoranda are put, pending a convenient time for recording. The outside of the envelope can be or is ruled for totaling and summarizing recordings. The system is simple, flexible, and convenient. It is likely to be adequate since, if there is not enough area on the outside of the envelope, a sheet can easily be added and slipped inside the envelope. Account envelopes which can be purchased often suggest a ledger account recording on the outside along with summaries. Such a ledger account is not adequate since the ledger should be permanent and the envelope account is only temporary, for a month or a year at the longest.

Either bound or loose-leaf notebooks may be used for keeping household accounts. The book itself may be simple if the organization of the items to be recorded is simple and direct. The loose-leaf book has the advantage of being more flexible than the bound book, since new leaves can be easily added and old ones replaced. If a loose-leaf book is used, one with metal strip fasteners will be found to be more durable than the ring type. The spiral notebook is not a loose-leaf book but a type of bound book. Notebooks are especially convenient when children are aiding in account-keeping, for they are durable and will withstand much handling.

The card-file type of account system can be expanded indefinitely, thus is highly flexible. It can be adequate, but it may not be simple or convenient, except for the person who enjoys a high degree of organization. If children are to aid in accounting, the card file is inadvisable because of the possibility of mixing

cards or even scattering them. The card file is really a one-man system.

Notes to Account Keepers

1. Start simply.
2. Work out a system to suit your personal or family needs.
3. Stick to your account-keeping until a habit is formed.
4. Control the accounts; do not let the accounts control you!

Managing the Family or Individual Bank Account

This discussion of how to manage a bank account, whether individual or family, is concerned entirely with the customer's part in his contacts with the bank from day to day. The bank is organized, like any business concern, for service to its customers and also for earning a return. The major contact of the family with its bank is through the checking account, the savings account, safety deposit boxes, and such credit or other transactions as may occur.

The Checking Account

The checking account, or demand-deposit account, is a real aid in financing a family. If properly used, it provides a means of checking and balancing to see with what accuracy the home balances are kept. A checking account is not being efficiently used by the person who calls the bank and asks, "What is my balance today?" or by the depositor who habitually overdraws his account. What good is the knowledge of the bank balance without a knowledge of all checks written and not cleared, and thus out against the balance?

Anyone who uses a bank for deposit of funds and utilizes its services should make a point of understanding its methods of operation and should cooperate by fulfilling his personal obligations to the bank. Ideally much of this information should be acquired by everyone during early adolescence; but experience with young women of high-school and college age reveals that many of them have never written a check and a larger number have never seen a customer's bank statement.

Of first importance in one's contact with the bank is to know the officials and employees who serve you regularly. If you establish yourself personally with your bank and manage your day-to-day use of the bank services with intelligence and business acumen, the bank will be as glad to extend credit to you when emergencies arise and you need additional funds as they are to serve you in the ordinary daily operations. This, of course, assumes that your income is large enough to warrant the credit you want.

Your usual day-by-day contact with the bank is represented by your checking account and your use of it; that is, by the sum on deposit and the checks you draw against it. When making a deposit, the amount should be recorded in at least two places: in your bank book or on a duplicate deposit slip which you can keep on file, and on the stub of your checkbook, which is furnished you by the bank. The date recorded on the stub should correspond with that on the bank book or deposit slip.

A check stub is as neatly and concisely organized for speed in calculation, for revealing pertinent information, and for final checking with the monthly bank statement as will be found anywhere in accounting. It contains an amazing amount of information, and if deposits and balances are accurately recorded it will be a source of much help in managing one's accounts. The stub provides places for the following items; the number of the check (valuable in saving time when checking the bank statement, page 329), the amount of the check, the date, the payee, the purpose for which the check was written, the balance carried forward after the previous check was drawn, the new deposits, the new balances, space for deducting amount of present check, and space for the balance to be carried forward to the next stub. If each item is carefully recorded and each calculation is carefully made, there is little excuse for overdrafts or lack of knowledge concerning your bank balance, allowing of course for occasional human error.

Checking the Bank Statement

A bank statement is a sheet prepared by the bank each month for each depositor. It may be obtained on request at the bank

or it will be mailed out each month if requested. The checking of this statement with one's check stubs is a simple process but an important one. By so doing one can verify the accuracy of his stub records, or detect errors, and can thus be sure of his bank balance. By guarding against overdrawing his account he saves the bank extra trouble and himself from embarrassment.

A BANK STATEMENT

Name of Bank					
Account with _____					\$50.50
Dates of cleared checks				Deposits	Balance
June 5	\$ 1.00	\$ 5.00	\$10.00	\$	\$34.50
June 10	3.00	6.00	25.00	50.00	50.50
June 18	1.00	10.00	1.00		38.50
June 25	20.00			10.00	28.50
June 30	1.00 *	0.20 *			27.30

* Service charges.

Reproduced above is a typical bank statement. Note the three major divisions, the three dollar-columns at the left showing all checks that have been cleared ^a on a given date (*not* those written on a given date). The middle column contains a space for recording deposits as made, the dates of which should correspond with the dates in the bank book or on duplicate slips. The right-hand column is used by the bank for recording the balance day by day. With the statement will be found all canceled checks which have been cleared.

To check the bank statement proceed as follows:

Compare deposits in the middle column with your record of deposits in bank book or duplicate deposit file and with deposits on check stubs.

^a "Cleared" means checks returned to the bank and amount on the check paid to payee and correspondingly deducted from the sum on deposit.

Compare checks as returned with the left-hand column recordings of checks cleared day by day to see that no error has been made on this score.

Arrange checks in numerical order (this will automatically arrange them by dates, demonstrating the value of numbering them).

Compare cleared checks, particularly the amounts, with stubs to see that no error has been made on your part.

Record at the bottom or on the back of your bank statement all checks you have written and which have not been cleared.

Add to the total of the uncleared checks your own checkbook balance as of the date you are checking.

From this total subtract any bank charges (see statement on page 329). The \$1.00 and the \$0.20 on the statement are charges for services; the \$1.00 is a service charge commonly made for an account which falls below \$100, and the 20 cents is a charge of 4 cents per check cleared over a certain number allowed. Bank service charges vary throughout the country.

Now compare your calculations with the bank balance. The two should be identical. If the two balances, your checkbook and the bank balance, are not identical, trace the error (that is, if you wish 100-percent balance).

Managing a Joint or Multiple Account

The joint account is used by two people, usually husband and wife, and the multiple account is used by more than two, usually members of a family. The management of such accounts, so far as the bank is concerned, is no different from that of any deposit account except that the names of the persons using the account must be registered. The responsibility for the use of a joint or multiple account lies in the hands of the two or the group using it, and not with the bank. A multiple account can be a great convenience for a family, for it enables anyone in the group to make disbursements or obtain cash, whereas depending upon one signature may cause delay or inconvenience. At the same time the arrangement has its disadvantages, for carelessness or irresponsible use of funds by any member of the group may cause embarrassment to both the family and the bank.

The joint or multiple account to be properly handled must

be worked as a cooperative enterprise of the highest type. One person should be in charge of such an arrangement, and each person who is free to check on the deposited sum will need to report promptly to the one in charge when a check is drawn.

Many families use multiple accounts. Their successful use no doubt depends largely on the training and experience of the individuals in the group. One father who had two sons and one daughter in college at the same time was overheard to say he did not believe in children's allowances. When questioned as to his policies and philosophy of children's participation in income use, he answered, "All three of my children have checkbooks and are privileged to draw funds as they need them so long as they notify me that they have done so." When further questioned as to dangers of the children overusing funds or taking advantage of the privilege, he answered, "They never have yet, and when they do it will be my fault because of some failure in their guidance and training."

Other Bank Services

The local commercial bank renders other services to its customers in addition to its usual banking facilities. The renting of safety deposit boxes for the safe-keeping of valuable papers such as securities and legal documents, and small personal objects such as jewelry, has long been a part of the banking service. These valuable articles, subject to loss by theft or fire, should always be kept in a safe place. The rental charge is nominal and the security is great. Indeed, this service constitutes one of the important reasons for an early connection with a bank.

In recent years banks have taken over the responsibility for the payment of once-a-month bills for many of their clients, such as utility bills, the telephone bill, and life-insurance premiums that are paid on a monthly basis. There usually is no charge for this service, which is a real convenience and time-saver for the customer. Another service is the privilege a customer has of requesting that a certain amount of money be transferred monthly from his checking account into savings—either a savings account, a bond-a-month account, or a Christmas club fund. All these services are useful in the management of a family's finances.

Additional References

- Bonde, Ruth, *Management in Living*, New York: The Macmillan Company, 1945, Chapter 7.
- Donaldson, Elvin F., *Personal Finance*, New York: The Ronald Press Company, Second Edition, 1956, Chapters 5 and 6.
- Forbes, Kathryn, *Mama's Bank Account*, New York: Harcourt, Brace and Co., 1943.
- Gross, Irma H., and Elizabeth Walbert Crandall, *Management for Modern Families*, New York: Appleton-Century-Crofts, 1954, pp. 183-195 and 546-547.
- Hanson, Arthur W., and Jerome B. Cohen, *Personal Finance*, Homewood, Illinois: Richard D. Irwin, 1954, Chapter 5.
- Household Finance Corporation, Money Management booklets, Chicago, *Children's Spending*, 1955, and *The Budget Calendar*, 1954.
- Morse, Richard L. D., *What Are You Worth?*, Department of Family Economics, Kansas State College, Manhattan, Kansas, 1957.
- Radell, Neva H., *Financial Planning for the Individual and Family*, New York: F. S. Crofts and Company, 1948, Case Problems 1 and 5.

PART **4** *Family Housing
Management*

15

Managing Housing

HOME SHOULD BE a place where each member of the family finds relaxation and opportunity for self-expression and happy group living. Housing for comfortable living should provide space for the family's daily activities, as well as for the personal activities of each member of the family. As the size, composition, and income of the family change, the housing needs also change. An understanding of the role a house plays in family living and in the changing patterns of family life makes it easier for the family to analyze its problems and make plans for the future.

Housing Needs in Different Stages of the Family Life Cycle

Each stage of the family life cycle has its own individual housing requirements. In the first stage the young married couple usually lives in furnished or rented rooms or a small rented apartment or house. During this time they may acquire home furnishings and accumulate savings for possible home ownership.

The next stage, which begins with the coming of the first baby, is marked by the need for more space for family living. As more children arrive, additional space is needed for privacy and for family and individual activities. These are the years when the family moves to a larger house or thinks about buying or building a home. It is also the time when the family income increases and when more can be spent on housing.

When the children reach grade and high-school years, the de-

mand for space for individual and group activities reaches its peak. This period covers the growing-up years of the children. "These are the years when they are learning to become adult members of the family and the community, the years of education and learning, at home and in the neighborhood as well as at school."¹

As the children leave home, the demands for housing decrease. During these later years adjustments in living space are often necessary and desirable.

Each of these periods of family life should be taken into consideration by all families in making both short- and long-time housing plans. The provision of a home with living space that meets the needs and desires of the family during the different stages of living and that keeps within the family's housing budget is the major objective of housing management.

Housing Costs and the Family Income

Housing costs may be in the form of rent or, if a house is owned, they may be the total costs connected with the purchase and maintenance of the property. When a loan is made, the monthly costs include repayment of the loan and payment of interest, property taxes, insurance, and upkeep. The amount that any individual or family can spend on rent or home ownership depends in a large measure on the income and the expenditures that must be made to meet the other needs. When other resources such as time, energy, and abilities of family members can be substituted for the use of money in building and remodeling, or in maintenance, housing costs may be lowered.

What Do Families Spend on Housing?

Housing budgets for families of two different income levels in the San Francisco Bay Area were reported by the Heller Committee for Research in Social Economics in 1957. The budget costs for the wage earner for both renting and home owning are given in Table 14. These figures show that the total cost of renting a 4- or 5-room dwelling, including water but no other

¹ *Houses for Family Living*. New York: The Woman's Foundation, 1948, p. 13.

TABLE 14. HOUSING BUDGET FOR WAGE EARNER *

(Figures in parentheses include sales tax on repair items)

Item	Monthly Cost	Annual Cost
A. Rented Home		
Total cost		\$720.00
Rent of 4- or 5-room dwelling, including water but no other utilities	\$60.00	
B. Owned Home		
Total cost ^a		\$1,039.12 (1,040.15)
PURCHASE TERMS		
Purchase price of 4- or 5-room house and lot	\$12,839	
Valuation for loan purposes	12,050	
Amount of mortgage (82% of valuation)	9,880	
Down payment	2,959	
Term of mortgage	23 years	
Interest rate	5¼%	
Total monthly payments	\$82.29	987.48
Principal and interest	62.24	
Taxes and assessments	15.12	
Mortgage insurance premium (first year)	3.95	
Fire insurance ^b	.98	
\$0.340 per \$100 for 3 years on insured valuation of house of \$10,328		
Repairs—0.5% of value of house excluding lot ^c		51.64 (52.67)

* *Quantity and Cost Budgets for Two Income Levels*, Heller Committee for Research in Social Economics, University of California, University Press, Berkeley, p. 66.

^a I.e., cash outlay excluding the down payment. The Heller Committee has never attempted to compute "real costs" of house purchase in terms of such items as interest foregone vs. alternative rent payments or depreciation vs. appreciation of property values.

^b Fire insurance with extended coverage based on rates for frame-type building with approved roof. Fire-insurance rates went up effective November 1, 1957. Had these increased rates been used, the monthly cost would have been \$1.12. Wage earner population weights are used in determining the average rate for the area.

^c Assumes one-half of this amount is for items subject to sales tax.

TABLE 15. HOUSING BUDGET FOR SALARIED WORKER *

(Figures in parentheses include sales tax on repair items)

Item	Monthly Cost	Annual Cost
Total cost ^a		\$1,290.84 (1,292.16)
PURCHASE TERMS		
Purchase price of 5- or 6-room house and lot	\$16,256	
Valuation for loan purposes	15,523	
Amount of mortgage (80% of valuation)	12,420	
Down payment	3,836	
Term of mortgage	23 years	
Interest rate	5¼%	
Total payments	\$102.06	1,224.72
Principal and interest	78.25	
Taxes and assessments	17.60	
Mortgage insurance premium (first year)	4.97	
Fire insurance ^b	1.24	
\$0.338 per \$100 for 3 years on insured valuation of \$13,223		
Repairs—0.5% of value of house excluding lot ^c		66.12 (67.44)

* *Quantity and Cost Budgets for Two Income Levels*, Heller Committee for Research in Social Economics, University of California, University Press, Berkeley, p. 29.

^a I.e., cash outlay excluding the down payment. The Heller Committee has never attempted to compute "real costs" of house purchase in terms of such items as interest foregone vs. alternative rent payments or depreciation vs. appreciation of property values.

^b Fire insurance with extended coverage based on rates for frame-type building with approved roof. Fire-insurance rates went up effective November 1, 1957. Had these increased rates been used, the monthly cost would have been \$1.43. Salaried worker population weights are used in determining the average rate for the area.

^c Assumes one-half of this amount is for items subject to sales tax.

utilities, during the time covered by the study was \$60 a month or \$720 a year. If the wage earner owns a 4- or 5-room house and lot, the monthly payment is \$82.29, and the annual cost, which includes repairs, is \$1,040.15. According to this report, home renting costs considerably less than home owning for the wage earner.

The housing budget for the salaried worker who owns a 5- or 6-room house and lot is shown in Table 15. For him the monthly payments are \$102.06, and the annual cost is \$1,292.16. This includes \$67.44 for repairs during the year. These data show that in September 1957, the estimated yearly cost of home ownership ranged from \$1,040.15 for the wage earner to \$1,292.16 for the salaried worker.

The wage earner with an income of \$5,832 who rented spent 12.3 percent of his income for housing. The wage earner with an income of \$6,204 who was a home owner spent slightly more or 16.8 percent. The salaried worker with an income of \$8,885 who owned his home spent 14.5 percent of his income on housing. Thus, housing was the second largest item in the family budget and for most families required from 12.3 to 16.8 percent of the family income. (See Figure 46, Appendix, page 509.)

Home Ownership and Renting

A 1957 survey showed that about 54 percent of all nonfarm spending units owned their homes, and 33 percent rented a house or an apartment. The rest either rented rooms in private households or lived in quarters they neither owned nor rented.²

The recent growth in home ownership was concentrated largely among spending units with incomes of \$5,000 or more in 1956 dollars. In early 1957 about 79 percent of all nonfarm spending units with incomes of \$7,500 or more and 64 percent of those with incomes of \$5,000 to \$7,499 were home owners. Consumers with incomes of \$5,000 or more owned more than one-half of all nonfarm houses.

In the group headed by persons 25 to 34 years of age, about 4 in 10 were home owners. This number increased to about

² "1957 Survey of Consumer Finances, Durable Goods and Housing," *Federal Reserve Bulletin*, Vol. 43 (June, 1957), p. 630.

6 in 10 in the group headed by persons 35 to 44 years of age. In the group headed by persons over 45 years of age about 7 in 10 reported owning a home. According to this survey most houses are bought or built during the expanding stage of the family life cycle, after the family has accumulated some savings and when the need for space is at its peak.

Changes in Family Housing

The housing situation is undergoing many changes. The expanding programs for rebuilding urban centers and a growing demand for convenient, central city locations have helped to increase the construction of apartment units in many cities. Young couples without children and elderly couples—now the fastest growing adult segments of the population—want and need this type of rental housing.³

Improved incomes and the availability of housing on liberal mortgage terms have made possible more and better housing space for many families. They have also encouraged many persons to incur relatively large debts early in the family life cycle.

The median cost of homes has risen steadily and represents not only an increase in building costs but an expansion in size of houses and the availability of modern plumbing and labor-saving equipment. There has been a steady movement of families from rural-farm to nonfarm areas, although about half of those who have shifted to nonfarm sources of income continue to live in the country. The higher incomes these families usually receive when the wage earners obtain nonfarm jobs helps them to improve their standard of housing.⁴

There has been a trend to suburban living. This movement has brought many changes in living patterns and therefore in expenditure patterns, not the least of which is the trend toward having more children and the consequent increase in housing costs.

³ "Outlook for New Construction in 1958," *Construction Review*, December, 1957, p. 4.

⁴ Frances Lomas Feldman, *The Family in a Money World*. Family Association of America, New York City, N. Y., 1957, p. 10.

Shall the Family Rent or Buy a Home?

The selection of a suitable dwelling for the family brings up the question: Shall the family rent or buy a home of its own? The satisfactions derived from home ownership make it a goal that many families set up as one they wish to attain, one that they are willing to work for over a long period of years.

Since buying a home involves such a large expenditure of money and frequently financial obligations that extend over a period of years, the family that is considering home ownership will do well to weigh carefully the advantages and disadvantages of both renting and owning before making a definite decision.

Advantages of Renting

It usually costs less to rent than to own a home.

The family that rents never suffers a loss of capital through the decline of property values.

The renting family has no responsibility for the management and upkeep of the property in which it lives.

The family that rents can move to another dwelling as housing needs change.

If the family's income is reduced, it can rent a less expensive dwelling.

If the family's income increases, it is free to move to a more desirable dwelling.

If the house is unsatisfactory, or if better housing can be found elsewhere, the family is free to move.

The renting family is not tied by the investment in a house if it wishes to take advantage of a promotion or to change from one form of work to another.

Disadvantages of Renting

The family that rents has nothing to show for its lifelong housing expenditures.

It is frequently difficult for the family to obtain necessary repairs on a rented house.

It is not always possible to find a house in the neighborhood desired.

When the housing supply is scarce, the renting family may have difficulty in finding a house it can afford to rent.

Advantages of Home Ownership

Home ownership frequently leads to financial independence.

Home ownership gives the family a feeling of security.

The responsibilities of ownership in meeting taxes, in making financial payments, and in making repairs, etc., develop business judgment and skill.

A home owner can secure credit without difficulty.

The family that owns its own home has greater freedom to live as it wishes, without interference from a landlord.

The home owner has greater opportunity for individual expression both in the exterior and interior of the house.

The home owner has the advantage of having neighbors and friends whose friendship lasts over a period of years.

The pride of possession usually inspires cooperation in doing work around the house and in the yard.

Better furnishings can be purchased when the home is owned, because they fit into a decorative plan that will last for a period of years instead of having to be changed frequently as the family moves from one house to another.

Disadvantages of Home Ownership

It usually costs more to own than to rent, if all costs of home ownership are accurately computed.

The struggle to meet costs of home ownership may rob certain members of the family of other development opportunities.

Ownership ties a family to a given location, since property often cannot be sold without a sacrifice.

Unless the family enjoys the cares and responsibilities of home ownership, they may prove too hazardous.

Property values may decline and investment in a house decrease accordingly.

In times of economic stress and reduced income the family may find itself encumbered with ownership costs out of reasonable relation to its income.

For one reason or another many families find that the advantages of owning one's home far outweigh the advantages of renting. The present and future income and probable savings of

the family, however, must be carefully considered before a definite decision can be made. If the family can count on the present income over a period of years, and if the yearly costs of home ownership are only slightly more than the amount the family is paying for rent, it is reasonable to assume that the financial responsibilities can be carried.

Renting a House or Apartment

After a desirable locality has been found, the family or individual that rents must decide whether to live in a house or apartment. Rented dwellings fall into two general classifications: the single-family, detached house and the multiple house or the duplex, flat, or apartment.

The single-family detached house makes the ideal housing for the family with children, since it gives greater privacy and freedom for the members of the group. The renting of a house carries with it the responsibilities for the care of the house and grounds, including the purchase of the necessary equipment.

The semidetached two-family house, or duplex, has many of the advantages of the single house. Privacy in this type of dwelling is best secured when entrances are widely separated and when common walls are well insulated. The row houses, which are single houses with common party walls, are most livable when the houses are built only two rooms deep. This arrangement gives direct exposure both for the rooms facing the street and those at the rear.

The apartment house, furnished or unfurnished, frees the family from the responsibility of the care of the house and property. This type of housing is most suitable for families without young children, for those who dislike living alone in a separate house, for working couples, and for single persons living as a family, such as congenial groups of men or women.

Many communities are now planned with different types of dwellings—single, twin, row, and apartment houses. Such a plan provides living arrangements for families of different kinds and sizes. "A complete family cycle can be lived in such a community—from the apartment of a young couple, to a row house, to

a simple house for a large family, back to an apartment again when the children are grown."⁵

Buying a House

The family that prefers to buy a house has the choice between buying a new house or an existing house. Before any decision can be reached, the advantages and costs of each plan should be studied and compared.

Buying a New House

A new house may be bought from the owner, a building company, real-estate firm, or contractor. When the right house can be found, this is an excellent way for those inexperienced in building to buy a new house. The materials and workmanship of the house should be carefully checked with the builders, and if there is any question, the advice of an expert should be sought. When the purchase is financed through a building and loan association or through a member agent of the Federal Housing Administration, this advice may be obtained from one of their experts.

The chief advantages in buying a new house are that it may be designed for better utilization of space, and it may have the latest modern equipment in the kitchen, laundry, and bathrooms. Also a new house costs less to maintain and operate, especially during the first years.

A new house under construction can frequently be bought from a contractor or building concern. This method gives the family an opportunity to make some of the final decisions without assuming the entire responsibility from the beginning. Families who have little time to spend on planning and building may find this a very convenient and satisfactory method. It must be remembered, however, that when changes or additions made by the family exceed the builder's price, these extra costs must be added in order to find the total cost of the house.

In some residential areas that are being improved by a devel-

⁵ Elizabeth Coit, "Pointers in Dwelling Design," *Journal of Home Economics*, Vol. 39 (January, 1947), p. 18.

oper one may buy a lot and select a model house to be copied, with certain changes specified to meet the family's particular needs. More and more homes today are being built by large-scale builders who may undertake a whole neighborhood at once. Under these conditions the streets and houses can be planned as a unit.

Buying an Existing House

An existing house may be bought from the owner or from a real-estate firm. As a general rule the cost of such a house is considerably less than that of a new house of the same size. Although the design and equipment are less likely to be modern, older houses are often more spacious and better suited to the needs of a growing family. Another advantage of buying an existing house is that it may be located in an established community with adequate schools, transportation, and shopping facilities.

One disadvantage of buying an older house is that the plumbing in the kitchen and bathrooms may not be as modern as that found in most new homes. Frequently, other things about the house may be in need of repair or replacement. In deciding whether a house is a good buy, it is well to obtain a cost estimate of all the necessary improvements. When this amount is added to the asking price of the house, one has a more accurate figure to use in comparing the cost of the house with that of others. One should also remember that the costs of upkeep and maintenance of older houses are usually higher than for a new one.

In looking at either houses or apartments to rent or buy, a prospective renter or owner should take time to check on the neighborhood, the age of the house, the builder, style of architecture, the grounds, structural conditions, adequacy of living quarters, arrangement of space, and on plumbing, wiring, heating, and kitchen equipment to see whether these facilities will meet the needs of the family.

Many questions can be answered through careful inspection, testing of equipment and plumbing, and by asking the present occupant or owner about them. The advice of an architect or a competent disinterested builder may be obtained on any points of construction that are difficult to judge. The use of the check

list on pages 346 and 347 for evaluating and comparing the apartments or houses that are available for rent or sale will help one to make intelligent decisions when choosing suitable housing for the family.

If the most important of these questions can be answered in the affirmative, it is safe to give the purchase of the house consideration.

Building a House

A lot may be purchased and a house built according to plans made by a family. Estimates of the building costs of the type of house a family wants can generally be obtained from local architects, contractors, or realtors. Construction costs are often figured on the cost per square foot of floor space. This information will give a family some idea of what it might cost to build a home.

Costs of Home Ownership

Before a family considers home ownership, the costs involved should be fully understood. No matter whether a family buys or builds a home, there are certain costs which occur that are in addition to the total cost of the house and lot. These must usually be paid before or at the time a loan is made. These initial costs include the preliminary and extra costs and the down payment.

Preliminary Costs

Some of the preliminary costs must be paid by the buyer, others are met by the seller of the property, and some may be included in the mortgage loan. Those which must be paid by the family when it buys or builds a home are given on page 348. An estimate of these costs will show how much a family must add to the other costs of home ownership.

Extra Costs

Additional expenses which sometimes must be met in buying or building a home (if not provided for in the loan) are those

CHECK LIST FOR RENTERS AND BUYERS

	Yes	No
Neighborhood		
Does the neighborhood appeal to the family?	_____	_____
Is it likely to maintain its present desirability?	_____	_____
Is it a convenient place for the family to live?	_____	_____
Are transportation facilities available?	_____	_____
Are schools, churches, libraries, and shopping facilities within reasonable distance?	_____	_____
Are streets well lighted and patrolled?	_____	_____
Are there any disturbing noises nearby?	_____	_____
Are there zoning regulations and restrictions in the neighborhood?	_____	_____
Exterior		
Is the style of the dwelling attractive?	_____	_____
When was it built?	_____	_____
Was it built by a reputable builder?	_____	_____
Is the exterior construction in good condition?	_____	_____
Windows and doors?	_____	_____
Roof and gutters?	_____	_____
Porches and steps?	_____	_____
Foundation?	_____	_____
Is the lot large enough for:		
Privacy?	_____	_____
Recreation activities?	_____	_____
Gardens?	_____	_____
Is the lot landscaped, with lawn and plantings in good condition?	_____	_____
Are there improvements on the lot:		
Utility connections?	_____	_____
Grading?	_____	_____
Streets and sidewalks?	_____	_____
Are there parking facilities:		
Garage or carport?	_____	_____
24-hour parking on street?	_____	_____
Entrance		
Are entrances well lighted?	_____	_____
Is the garage well lighted?	_____	_____
Is there a side or rear entrance for deliveries?	_____	_____
Interior		
Are the following in good condition:		
Windows and doors?	_____	_____
Floors, walls, and ceilings?	_____	_____
Woodwork?	_____	_____

CHECK LIST FOR RENTERS AND BUYERS (Cont.)

	Yes	No
Do the doors and windows work easily?	_____	_____
Do the doorknobs and locks work smoothly?	_____	_____
Do the outside doors have cylinder locks?	_____	_____
Are the windows ample in size and number?	_____	_____
Are they well located?	_____	_____
Is the insulation adequate?	_____	_____
Are there plenty of conveniently located lighting and service outlets and wall switches?	_____	_____
Are the stairs designed for comfort and safety?	_____	_____
Are they well lighted?	_____	_____
House Equipment		
Are the following in good condition and adequate for present-day needs:		
Heating unit?	_____	_____
Plumbing?	_____	_____
Water heater?	_____	_____
Wiring?	_____	_____
Kitchen appliances?	_____	_____
Laundry appliances?	_____	_____
Are the windows equipped with:		
Shades or blinds?	_____	_____
Screens?	_____	_____
Storm windows?	_____	_____
Is there a storage place for:		
Screens?	_____	_____
Storm windows and doors?	_____	_____
Garden and yard tools?	_____	_____
Outdoor furniture?	_____	_____
Are there facilities for disposal of garbage:		
Disposer in kitchen sink?	_____	_____
Incinerator?	_____	_____
City garbage collection?	_____	_____
Arrangement		
Does the space meet the present and probable future needs of the family?	_____	_____
Is the arrangement of the halls and rooms convenient?	_____	_____
Is the arrangement of work space in the kitchen satisfactory?	_____	_____
Are closets, cabinets, and all other storage spaces adequate?	_____	_____
Is the bathroom conveniently located?	_____	_____
Is there adequate space for laundry equipment?	_____	_____

for kitchen and laundry equipment, such as a refrigerator, stove, wall oven, dishwasher, sink disposer, or laundry trays.

When houses are sold on the "package" basis certain pieces of equipment are included in the price of the house; other items may not be included. Landscaping may be an extra cost. When an existing house is bought, such items as repairs and modernization and yard improvements may be extra costs that must be planned for.

Altogether the preliminary and extra costs may amount to a considerable sum. A family needs therefore to plan ahead and set aside enough money to meet them when they must be paid. Only when these costs are added to the cost of the house and lot, does a family have a complete picture of the cost of owning its home.

GUIDE FOR ESTIMATING PRELIMINARY AND EXTRA COSTS OF HOME OWNERSHIP

	Buying a House	Building a House
Preliminary costs		
Appraisal fees	\$_____	\$_____
Loan fees, if any, of lending agency	_____	_____
Revenue stamps, notary fees	_____	_____
Fees for recording the mortgage and the deed to the property	_____	_____
Legal charges for examining and transferring the title to the property (to show clear ownership)	_____	_____
Prorated insurance and property taxes (that portion of the taxes and insurance already paid by the seller for which you must reimburse him)	_____	_____
Engineer's survey of property, if needed to establish property lines	_____	_____
Cost of plans or architectural services		_____
Interest on loan advances to contractors		_____
Premiums for insurance (fire, theft, hazard, and liability, depending on agreement with contractor)		_____
Inspection fees		_____
Others		_____
Extra costs		
Landscaping		_____
Improvement of property	_____	_____
Repairs	_____	
Others		
Total		\$=====

Down Payment

The down payment a family can make in buying or building a home will depend on how much they have been able to save and what cash reserve they feel should be retained to meet emergencies and to take care of the preliminary and extra costs.

The size of the down payment is important, since it usually determines the amount of money that must be borrowed. Lending agencies require that a certain percentage of the total cost of the house must be paid in cash. If a family cannot meet this requirement, they may have to wait until they can save the necessary amount for the down payment on the kind of house they want. If their need for a house is urgent, they may have to choose a less expensive house that requires a down payment low enough for their budget. The percentage of the total cost of the house that must be paid varies among lending agencies, and many times will depend on the family's credit rating.

If an FHA-insured loan is obtained, the down payment required may be less than under the conventional loan. When a family can make a larger down payment than is required, the mortgage will be smaller and the monthly costs less.

Financing in Buying or Building a Home

Very few families have enough money on hand to pay the entire cost of buying or building a home. Most home owners make a down payment from their savings and finance the rest of their home with a mortgage loan. Families who are thinking of buying or building need to figure out: (1) how much they can spend on a home; (2) how much money they have available for a down payment; and (3) the amount they will need to borrow. These items must all be carefully considered in financing a home.

How Much Should a Family Spend on a Home?

Families that budget their income can make a very close estimate of the amount they can spend for a home. The family's yearly income and expense records may be used in arriving at this figure. The estimate can be made on a monthly or yearly basis by the following procedure.

BUDGET FOR HOUSING *

Food and clothing	\$ _____	TOTAL INCOME	\$ _____
Utilities and fuel	_____	Minus income tax and pay-	_____
Medical care	_____	ments on retirement ben-	_____
		efits	_____
Life insurance and savings	_____	TOTAL NET INCOME	_____
Recreation	_____	Minus total living expenses	_____
Transportation (including	_____	other than housing	_____
car)	_____	INCOME AVAILABLE	_____
Installment payments (i.e.,	_____	FOR HOUSING	_____
refrigerator, television	_____		
set, washing machine)	_____		
Other family expenses	_____		
TOTAL LIVING EXPENSES	_____		
OTHER THAN HOUSING	_____		

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Monthly and Annual Costs During Payment of Loan

The monthly and annual expenses in home ownership and financing vary. They depend on the interest rate and the period provided for the repayment of the loan and on taxes, insurance, and upkeep.

Most amortized mortgage loans are made for 10 to 20 years, although some FHA loans may run longer. A long-term loan requires smaller monthly payments than a short-term loan. This is illustrated by Table 16. The lower monthly payments on the long-term mortgage may look attractive, but the total interest charges paid over the longer period are larger.

The figures in Table 16 show the costs in financing a home *after* the preliminary costs and down payment are paid. They are based on a systematic loan reduction plan (constant monthly payment plan). This plan of payment is called amortization of the debt.

Tax rates on real estate vary in different communities, but they usually average 2½ percent of the assessed value of the property. Special assessments for civic improvements may have

to be added to this bill. Lending agencies require a home owner to carry fire, wind, and other hazard insurance on the property. The policy should also carry additional insurance to protect the equity of the home owner. Insurance costs range from $\frac{1}{4}$ to $\frac{1}{2}$ percent of the price of the house.

Maintenance costs are usually estimated at $1\frac{1}{2}$ to $2\frac{1}{2}$ percent of the value of the house. They are usually small on a new home for the first few years, but they become greater as the house becomes older.

About \$40 for every \$1,000 loaned on the house is allowed annually for taxes, insurance, and upkeep in Table 16. By using these figures a family can easily estimate the monthly and annual costs on each \$1,000 that must be borrowed and can know whether the income is sufficient to carry the costs of home ownership.

When a family has determined its budget allowance for housing and the annual cost of home ownership for each \$1,000 of

TABLE 16. ANNUAL OUTLAY FOR HOME OWNERSHIP ON EACH \$1,000 BORROWED *

Payment period	5% Interest			6% Interest		
	10 Years	15 Years	20 Years	10 Years	15 Years	20 Years
Interest and payment on each \$1,000 of loan per year (based on a systematic loan reduction plan)	\$127	\$95	\$79	\$133	\$101	\$86
Taxes and assessments	18	18	18	18	18	18
Insurance	3	3	3	3	3	3
Upkeep	20	20	20	20	20	20
Total annual outlay on each \$1,000 borrowed	\$168	\$136	\$120	\$174	\$142	\$127

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TABLE 17. HOW EXPENSIVE A HOME CAN YOU AFFORD? *

Budget Allowance for Housing		Amount of Mortgage Which Budget Will Finance						Down Payment (Fill in)	Total Amount You Can Spend for a Home
		5% Interest			6% Interest				
Monthly	Annual	10 Years	15 Years	20 Years	10 Years	15 Years	20 Years		
\$25	\$300	\$1,790	\$2,210	\$2,500	\$1,720	\$2,110	\$2,360		
30	360	2,140	2,650	3,000	2,070	2,540	2,830		
35	420	2,500	3,090	3,500	2,410	2,960	3,310		
40	480	2,860	3,530	4,000	2,760	3,380	3,780		
50	600	3,570	4,410	5,000	3,450	4,230	4,720		
60	720	4,290	5,290	6,000	4,140	5,070	5,670		
80	960	5,710	7,060	8,000	5,520	6,760	7,560		
100	1,200	7,140	8,820	10,000	6,700	8,450	9,450		
125	1,500	8,930	11,030	12,500	8,620	10,560	11,810		
150	1,800	10,620	13,200	14,970	10,230	12,590	14,150		
175	2,100	12,390	15,400	17,460	11,940	14,690	16,510		
200	2,400	14,160	17,600	19,960	13,650	16,790	18,870		
225	2,700	15,930	19,800	22,450	15,350	18,890	21,230		
250	3,000	17,700	22,000	24,950	17,060	20,980	23,590		

Examples

1. Mr. W's budget shows \$50 per month "allowance for housing." He has \$2000 for a down payment after allowing for preliminary costs. He can get a 5% loan for 20 years. How much can he spend for a home?

Read down the column, "Budget Allowance for Housing," to \$50 a month, and across to the column, "5% interest—20 years," to find \$5000. This is the amount of mortgage his income will finance. Add \$2000 (down payment) to \$5000. This makes the total cost of the property which he can pay for and maintain \$7000. (Mr. W. must remember to set aside approximately \$7 per month† for taxes, insurance and upkeep on that portion of the house represented by his \$2000 down payment since these items are not included elsewhere.)

2. Mr. H. wants to buy property selling for \$10,000. He has \$3300 down payment and will borrow the remainder at 5% for 10 years. How much of his income must be set aside to cover cost of ownership?

From \$10,000 subtract \$3300. This leaves \$6700, the amount of loan required. According to the table under "5% for 10 years," a \$6760 loan requires about \$1100 per year, or \$90 per month which must be set aside from his total net income.

He must remember to set aside approximately \$12 per month† for taxes, insurance and upkeep on that portion of the house represented by his \$3300 down payment since these items are not included elsewhere. The total amount to be set aside for housing, therefore, will be \$102 per month.

3. Mr. S. thinks he can afford to spend about \$720 per year for housing. He has \$1500 for a down payment, and can obtain a 6% loan over 15 years. What is the value of the property which he can afford?

In the table, under annual allowance for housing, locate \$720. Read across to column for "6%—15 years" to find loan value of \$5070. Add the down payment of \$1500. The total property value thus is \$6570. The additional amount of income which must be set aside for taxes, insurance and upkeep on that portion of the house represented by his \$1500 down payment is \$5.25 per month.†

His allowance for housing must be \$780 per year, or \$65 per month.

† \$18 for taxes and assessments, \$3 for insurance, and \$20 upkeep per year per \$1000 of loan, or approximately \$3.50 each month

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loan, it is ready to estimate the total amount that can be spent for a home. Table 17 shows the total price of the house that the family's monthly budget allowance for housing will finance at the different interest rates allowing different periods for payment. It is based on Table 16 on page 351.

To use Table 17 a family first finds its budget allowances for housing in either the monthly or the annual column. Then it is necessary to read across to the column showing the rate of interest that can be obtained and the number of years the loan will run. The figure found here is the amount of the mortgage loan which the family's budget can finance. When this amount is added to the down payment the family can make, the resulting figure represents the total cost of the home they can afford. This table includes taxes, insurance, and upkeep on the mortgage only. In addition to this, taxes, insurance, and upkeep costs must be paid on the equivalent of the down payment.

It is advisable for a family to check its estimate of its loan requirement with a reliable lending agency and get the agency's advice regarding the making of a loan on the property.

Types of Mortgage Loans

By far the majority of persons wishing to become home owners make a down payment on a home and borrow whatever more is necessary from a lending agency, giving a mortgage on the property as security. Loans made on real estate are insured by the legal credit instrument, the mortgage. Two types are commonly used in financing home ownership.

A *straight mortgage* or fixed mortgage is a loan at a given interest rate for a definite period with promise to pay the full amount on a definite date. If the borrower is unable to meet his obligations when the mortgage comes due, he may have to raise funds elsewhere or renew the mortgage. A renewal involves the payment of certain fees which is an added expense. Because a down payment of at least 40 percent is required, many home owners are unable to use this method of financing.

The *amortized mortgage* calls for fixed monthly payments, which include both the interest due and a portion of the prin-

principal. As payments proceed, the amount going to the principal gradually increases and the amount allocated to interest decreases correspondingly. The amortization plan is the soundest method of financing a home for the average family, since its terms are definitely fixed in advance to fit the family's financial status and mode of living. This method of payment leads most easily to the family's goal—a debt-free home.

A package loan is a variation of the amortized mortgage which allows a family to include in the mortgage on a house, the cost of equipment that is an integral part of the house.⁶ This gives the family the advantage of spreading these costs over the length of time the mortgage on the house runs.

An open-end mortgage contains a clause which gives the home owner who wishes to modernize his home the privilege of requesting more money to be added to the balance still owed by him, under the terms of his original mortgage. The total loan outstanding at any time is usually limited to the amount of the original loan.⁷

Any family that wishes to build a home may apply for an FHA insured loan at a financial institution approved by the Federal Housing Administration. The FHA does not lend money to home owners; it merely insures the different types of lending institutions, who lend money for home building, against loss. The installments include a partial repayment of the principal, interest on the unpaid balance, and a $\frac{1}{2}$ of 1 percent mortgage insurance premium on the unpaid balance of the loan.

The VA (Veterans Administration) is also in the mortgage insurance business to insure lenders against loss on veterans' loans. Both of these government agencies prescribe the terms and arrangements of the loans they insure, regardless of who lends the money.⁸

Life insurance with mortgage tie-in is a form of life insurance which provides that the mortgage will be paid in full in case of

⁶ Household Finance Corporation, Money Management booklets, Chicago, *Your Shelter Dollar*, 1957.

⁷ *Ibid.*, p. 28.

⁸ "Financing," *House and Garden Book of Building*, Fall-Winter 1957-1958, p. 71.

the death of the owner (who is generally the head of the family) and the breadwinner. The mortgage is a lien on the property. This type of insurance, which gives protection while the loan is being paid off, is one worth considering.⁹

Obtaining the Loan

Money for the financing of home ownership may be borrowed from several sources. Most loans are made with commercial and savings banks, mortgage companies, insurance companies, and savings and loans associations (or building and loan associations). When a family decides on home ownership and the buying of either an existing house or land on which to build, the plans of all lending agencies should be carefully investigated.

The various mortgage costs, including broker's commissions and all initial service charges of the lending agencies should be compared. The rate of commission on FHA-insured and VA-guaranteed loans is regulated by the government. With these loans, the law prohibits the charging of a fee over a specified maximum by the lender to the borrower.

If a family plans to build a house, it will probably need money to pay the builder as construction progresses. The possibility of obtaining a construction loan and the charges for such a loan should be discussed with a lending agency before any expenses are incurred for plans and specifications.

Application for a Loan

As soon as a satisfactory loan plan has been found, an application for a loan from the lending agency must be made. An application usually includes such information as (1) the amount of loan needed; (2) the terms of the loan requested; (3) credit references, present income, obligations, and possible future expenses of the borrower; and (4) the location and description of the property on which the family wants the loan and will give as

⁹ H. E. Handford, "Signing up Loans for Life Companies," *Insured Mortgage Portfolio*, Vol. 11, No. 4, Second Quarter, 1947, Federal Housing Administration, p. 5.

security. The credit rating of the family and the appraisal of the property determine the amount a lending agency can lend.¹⁰

If the request is accepted, the lending agency usually issues a letter of commitment outlining the terms of the mortgage. This enables the home owner to proceed with arrangements to purchase the property and to make contacts with an architect and contractors.¹¹

Closing the Loan or Final Settlement

After the loan is approved by the lending agency, a clear title to the property must be established. Legal documents that must be signed in order to close the loan are (1) the note or bond, the promise to repay the money borrowed; and (2) the mortgage, a conditional conveyance of property to secure the note or the promise to repay. When these are signed, the home buyer or builder is required to make his down payment and pay the preliminary costs. These are the fees mentioned earlier, for all the various documents that have been drawn and services rendered in connection with the buying of the property, borrowing, and taking title. The funds are then turned over to him by the lending agency, so that plans for the purchase of property can be made. The homeowner receives copies of the bond and mortgage.¹²

Title to Real Estate

Before realty is transferred an abstract of title is made showing all the transactions that have been made in connection with the property from the time it was granted from the government down to the present transfer. The title abstract gives the facts as they can be found, but it gives no assurance of the validity of the title. There is always the possibility that a claim may be brought against the buyer because of some defect in the title.

As a result, title insurance companies have been established to protect owners and mortgagees against hidden risks which may

¹⁰ Russell M. Nolen, *Financing the Home*, University of Illinois Small Homes Council, Circular A1.3, p. 7.

¹¹ *Ibid.*, p. 8.

¹² Arthur W. Hanson and Jerome B. Cohen, *Personal Finance*, Homewood, Illinois: Richard D. Irwin, 1955, Chapter 10.

be involved in the purchase of real estate. The abstract is often prepared and examined by the title insurance company. It then issues a title insurance policy under which it agrees to make good any hidden defects in the title, thus giving protection to the purchaser or mortgagee from any claim against the property.¹³ Insuring the title is a wise procedure for all purchasers of real estate, because of the security it offers.

Deeds

The title to real estate is acquired by means of a deed, which is the written legalized evidence of the transaction between the owner and the buyer. A deed is an executed contract as soon as it has been signed by the grantor and delivered to the grantee, or new owner. If the seller is married, it is customary for the wife to join as a grantor, thereby releasing her right of dower.

Before the deed is made out the husband and wife should decide if they wish to hold the property as joint tenants or as tenants in common. Joint tenancy means that in the event of the death of one or the other owners the property passes to the survivor by the operation of the law, without the necessity of any further legal proceedings. Tenancy in common means that each tenant in common owns a certain interest in the property. If one of the tenants dies, his share descends to his heirs. Each tenant has the right to sell, assign, or convey his share of the property. In many states, the holding of a home in joint tenancy is the most practicable arrangement between husband and wife.¹⁴

When the buyer is able to pay cash for the property, the transaction may be closed and the deed given immediately to the buyer. It should then be recorded at the courthouse in the county in which the property is located. If the buyer does not have sufficient cash to pay the entire purchase price, he may pay part cash and give a mortgage for the unpaid balance. When this method of purchase is used, the deed to the land is executed and delivered to the buyer or his representative and a mortgage

¹³ Miles L. Colcan, *American Housing*, New York: Twentieth Century Fund, 1944, pp. 212-215.

¹⁴ Harold R. and Catherine Sleeper, *The House for You*, New York: John Wiley and Sons, 1948, p. 100.

is given by the buyer to secure the payment of the loan on the property. After the deed and mortgage are recorded, the mortgage is held by the original owner until final payment is made.

When the loan or mortgage is paid, the mortgage is given to the buyer and also a "satisfaction of mortgage," a formal instrument which describes the mortgage and states that it has been paid. When this is signed by the mortgagee, it should be recorded in the courthouse.

Additional References

- Becker, Howard, and Reuben Hill, *Family, Marriage and Parenthood*, Boston: D. C. Heath and Company, 1955, Chapter 19, pp. 558-595.
- Beyer, Glenn H., *Housing: A Factual Analysis*, New York: The Macmillan Company, 1958.
- Bigelow, Howard F., *Family Finance*, Philadelphia: J. B. Lippincott Company, 1953.
- Callendar, John H., *Before You Buy a House*, New York: Crown Publishers, 1953.
- Glick, Paul C., *American Families*, New York: John Wiley and Sons, 1957.
- Greenwald, William I., *Buy or Rent?*, New York: Twayne Publishers, 1958.
- Hatcher, Flora Y., "Housing Older People," *Journal of Home Economics*, Vol. 52 (May, 1960), 336-339.
- Housing for the Elderly*, Federal Housing Administration, Washington, D. C., 1956.
- Lusk, Harold F., *Law of the Real Estate Business*, Homewood, Illinois: Richard D. Irwin, 1958.
- Mathiasen, Geneva and Edward H. Noakes, *Planning Homes for the Aged*, New York: F. W. Dodge Corporation, 1959.
- Silberman, C. E., and T. May, "The Coming Changes in Housing," *Fortune* (August, 1959), 89-92.
- Troelstrup, Arch W., "Should We Continue to Rent or Buy a House?" *Journal of Home Economics*, Vol. 40 (February, 1948), pp. 67-68.
- Troelstrup, Arch W., *Consumer Problems*, New York: McGraw-Hill Book Company, Second Edition, 1957.
- Winnick, Louis, *American Housing and Its Use: The Demand for Shelter Space*, New York: John Wiley and Sons, 1957.

THREE RESPONSIBILITIES immediately face families or individuals who plan to build a house: choosing a suitable location and lot; obtaining plans for a house that will serve their needs and desires and that they can afford to build; and finding reliable and capable professional help to build the house.

In making these choices, individual and family values play a major role. The home values sought by most persons were found by Cutler^{1,2} to be beauty, comfort, convenience, location, health, personal interests, privacy, safety, friendship activities, and economy. All these values are closely related; and consciously or unconsciously they direct one's thinking and influence one's decisions about the house. Cutler's study shows that the home values considered most important to a family are evident in the kind of house in which they live and in the kind of activities carried on in the home.

Beyer³ lists nine values as having relevance to housing design: economy, family centrism, physical health, esthetics, leisure, equality, freedom, mental health, and social prestige. An orien-

¹ Virginia F. Cutler, *Personal and Family Values in the Choice of a Home*, Cornell Univ. Agr. Exp. Sta. Bul. 840, 1947, p. 6.

² Virginia F. Cutler, "A Technique for Improving Family Housing," *Journal of Home Economics*, Vol. 39 (March, 1947), pp. 141-147.

³ Glenn H. Beyer, *Housing: A Factual Analysis*, New York: The Macmillan Company, 1958, pp. 174-177, 290.

tation toward economy, for example, would place emphasis on cost factors in planning and building; while orientation toward family centrism would suggest plans for a family-centered living area, where the family could play and work together. Of course, certain features in a home may be a source of major satisfaction to some individuals and other features to others.

Choosing the Location and Lot

A number of things must be taken into consideration in choosing the general location of a home, especially if the family expects to build and live in a locality permanently. In comparing the different locations, the following factors should be carefully studied in light of the family's needs and desires: the surroundings; the type of houses in the community; the desirability of the neighborhood; and the nearness to work, schools, churches, shopping, and recreation centers. If there are building restrictions and zoning regulations they should also be investigated, since such ordinances usually determine the possible future development of the residential district which may affect the value of the property. Other important factors to be considered are the taxes and special assessments for paving, street lighting, or other improvements, the protective services offered to home owners in the form of fire and police protection, sanitary provisions, street lighting, and traffic regulations.

In choosing the site, both the cost of the lot and the probable cost of grading and improvement are important, since these costs often determine the amount that can be spent on the house.

The cost of a lot depends largely on its location, size, and improvements. The proportion of the total property investment that should be allocated to the purchase price of a lot depends somewhat on the price of the house.

A lot that is reasonably level permits the use of almost any plan, while a rolling or hillside site usually requires the making of a special plan. This often calls for the services of an architect, a cost which must be considered in choosing the site. Lots that require grading and filling or the building of retaining walls usually increase the building costs.

The size and shape of the lot also affect the plan of the house. Narrow lots allow for little flexibility in house design and in the location of the house on the lot. Wide lots offer greater flexibility in planning for family needs, and usually several locations for the house are possible. In most climates the desirable main exposure is to the south. When the living rooms and bedrooms face the south or west, the greatest use is made of the sunlight and the prevailing summer breezes.⁴

Before buying a lot a family will find it desirable to check the following questions:

1. Is the lot a desirable size and shape?
2. Which way does it face?
3. Does the lay of the land make it an expensive lot on which to build?
4. Is the lot well drained?
5. Has it been filled in?
6. What distance must the house be placed from the street and other borders of the lot?
7. Are all the utilities—water, gas, electricity, sewage, and telephone—available?
8. Can the site be planned for privacy and outdoor living? For sunlight, breezes and best views?

What Activities Must Be Provided For in the House?

After the building site has been selected, the next step is the making or choosing of a house plan that will meet the needs of the family. A house should provide a place for the recreational activities of the family, for the various household activities, and for the rest and personal activities of each member of the family. In most houses certain rooms and spaces are used for these family activities. In the larger houses several rooms may be given over to each of the major activities; in smaller houses one room often serves more than one purpose.

In the family house of average size, the living and dining rooms are the rooms most generally found in the recreation area. The

⁴ Harold R. and Catherine Sleeper, *The House for You*, New York: John Wiley and Sons, 1948, pp. 102-124.

kitchen, service halls, laundry, utility or workroom are the rooms most frequently included in the work area, and the bedrooms, bathrooms, and storage closets make up the rest area. In the majority of small houses the largest amount of space is devoted to the rest and recreation areas and the smallest to the work area. In the rural home more space is usually given to the work area than in the urban home. Recreation or play areas are sometimes planned as separate rooms in the basement, attic, or on the first floor by families who need such space. In small houses recreational space is usually provided for in the living room-dining room, a corner of the kitchen, or the utility room. In many homes, double-partition wall-closets are being used to provide adequate storage space in the different areas.

Relation of Activity Areas of the House

The essential quality which makes a house livable and usable is the arrangement of the main activity areas. According to Carter and Hinchcliff, "the value of a house plan depends on putting the areas together in a workable arrangement."⁶ A house which is arranged to meet the family's needs permits household activities to flow along with the minimum effort. In a well-planned house, the relation and interrelation of rooms and space are economical, efficient, and convenient.

Circulation

Easy communication between rooms is one of the most important factors in making the house livable. This is achieved through the wise use of doors and the convenient placement of halls and stairways. Doors provide the most direct passageway between rooms. They establish traffic routes, and if improperly placed, may cause annoyance and interrupt family activities. Halls and stairways should allow movement throughout the house and to the outside without disturbing individual and family activities.

The house plan should afford entrance into the house without

⁶ Deane G. Carter and Keith H. Hinchcliff, *Family Housing*, New York: John Wiley and Sons, 1949, Chapter 4, p. 46.

too much intrusion into the family life in any area. This is usually made possible by means of front and rear entrance halls which connect with the circulation routes between the different areas. (See Figures 26 and 32.) Hallways, however, increase the cost of the house, and many times it is necessary to use the funds available for other important needs. When it is necessary to open the front door directly into the living room, care should be taken to locate the opening so that the major part of the living room is not used as a traffic route to the kitchen and other rooms. (See Figures 28; 29; and 32.)

In a two-story house one should be able to go directly upstairs and to the living room from the main entrance hall. (See Figure 30, Plan 2.) If there is no entrance hall, the stairway should be located so that only a small portion of the living room is used as a hall or passageway.)|

If the house has a basement in which there is a coal-burning furnace and a laundry, there should be a direct route from the basement to the outdoors. It should not be necessary to carry baskets of clothes and ashes from the furnace through the kitchen. A direct route from the rear door to the kitchen is also desirable for the delivery of groceries and the removal of garbage to outside containers. (See Figures 26; 28; 29; 30; 32; and 33.)

Since the steps that must be taken by the homemaker in doing the work of the household and in caring for children depend to a great extent on the arrangement of rooms, every effort should be made to plan direct and step-saving circulation patterns throughout the house.

(The relation of the work area to the rest of the house is important because of the numerous trips that must be made from the kitchen to the other rooms and outside doors. Short, direct traffic ways from the work area to the dining room, the living room, the children's play space—both indoors and outdoors—bedrooms, bathroom, front and rear doors, and the garage or carport save steps for everyone, especially the homemaker.)

Since privacy and quiet are sought in the sleeping area, a hall which separates this area from the recreation area is desirable in a one-story house or in any house which has a bedroom downstairs. (See Figures 26; 27; 29; 32; and 33.) In a two-story house,

the stairway and the hall upstairs give access and privacy to this area. The maximum privacy in the rest area is achieved when all the bedrooms connect directly with the hall. When the upstairs hall is used primarily as a passageway, it should be reduced to a minimum in order to provide the maximum amount of space in the other areas. (See Figure 30, Plan 2A.)

When there is only one bathroom it should be convenient in location to all the bedrooms and the entrance to it should be from the hall. (See Figures 26; 28; and 32.) Two bathrooms are a great convenience when there are children of different ages in the family. (See Figures 29 and 31.) In a two-story house

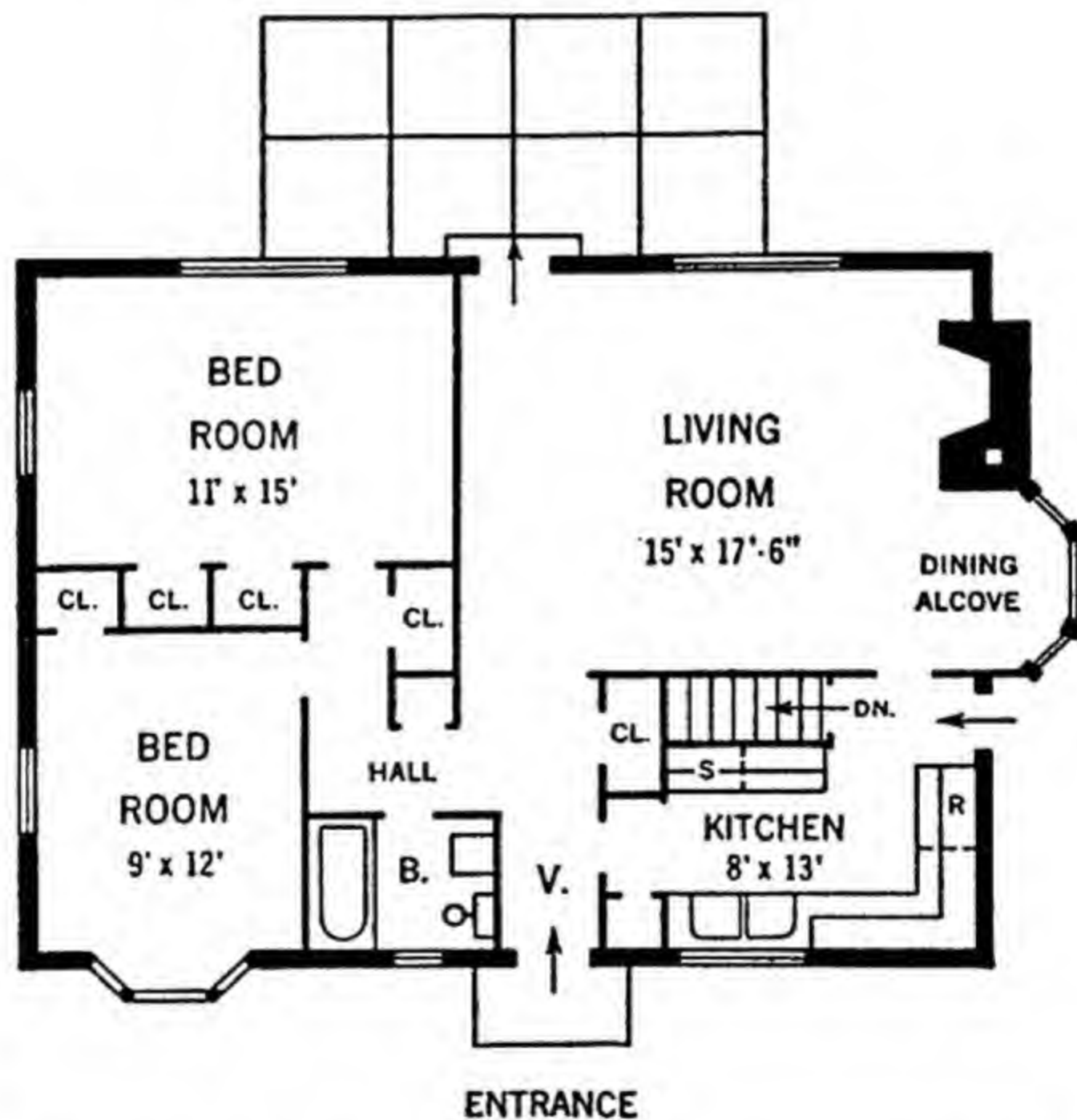


Figure 26. The living and dining areas in this compact plan have been skillfully combined. The hall space provides easy movement throughout the house. The kitchen, bedrooms, and bathroom may be reached from the front or side door without entering the living room. The basement stair has direct access to the service entrance. Step-saving routes from the kitchen to the entrance doors and other parts of the house have been carefully planned. Adequate storage space is provided in each area. (Courtesy of Samuel Glaser, Architect, *Designs for 60 Small Houses*.)

a conveniently placed lavatory on the first floor or in the basement is desirable.

The laundry may be located on the first floor or in the basement, or facilities may be provided in the kitchen. In many homes the laundry is in a separate room adjoining the kitchen. (See Figures 29 and 33.) When there are small children, the play room or play space should be located in the kitchen or within easy reach of the kitchen so that the mother can keep a watchful eye on the children while she attends to other duties. (See Figures 28; 29; 30, Plan 1; 32; and 33.)

In the majority of homes the automobile is so much a part of the family's daily life that it should be within easy reach of the house. The garage or carport may be placed so that it is convenient to the front or side entrance, or it may be attached to

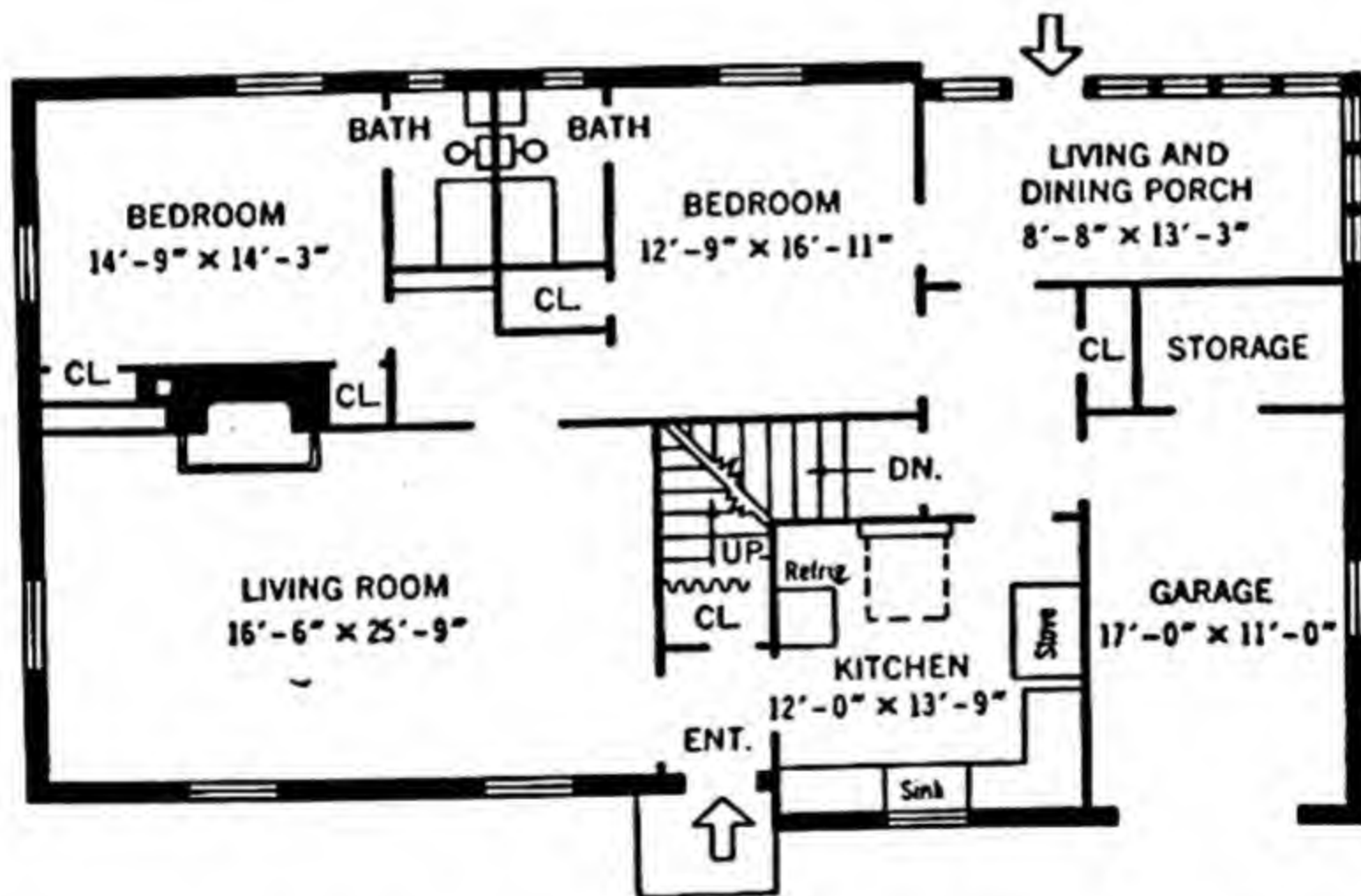


Figure 27. This plan is a good example of the utilization of all available space. The living and sleeping areas are large and adapted to multi-use. Dining space has been provided in the living room, living porch, and in the kitchen. The bedrooms are located away from the street and each has a bathroom. Either one may be used as a study. Good circulation routes have been established through the wise use of halls and doors. The garage opens into a small service hall which connects not only with the kitchen, but also with the porch, bedroom, and basement recreation room. Excellent storage space has been planned throughout the house. Expansion is provided for on the second floor. (House for Paulena Nickell. W. H. Badgett, Architect.)

the house with a direct entrance from the house to the garage. When this entrance is made by means of a hall, the coat closet and other areas of the house are usually more easily accessible than when the door opens into one of the rooms of the house. The garage near the house affords easy access to the street and decreases the length of the driveway. This arrangement allows more space at the rear portion of the lot to be used for lawn, garden, and recreational activities. (See Figures 27; 28; 29; 30, Plan 3; and 31.)

Flexibility

In order to find space for all the family activities, it is often necessary to design rooms so that they will serve several different functions. Flexible room arrangements in a house mean that

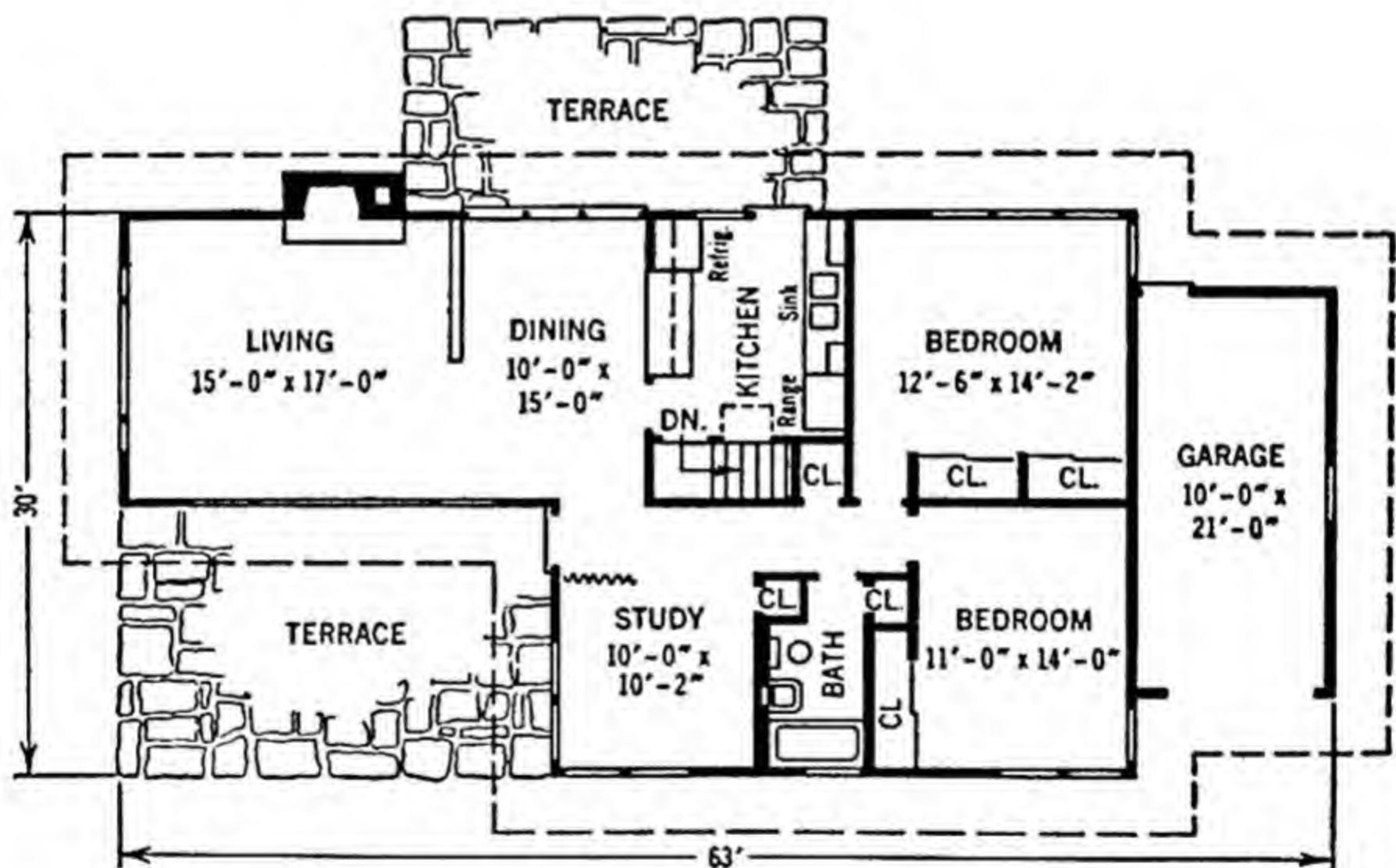


Figure 28. This plan is unusually flexible. The large living-dining area can double as one or two rooms. The study may serve as library, guest room, dining room, or extra living room. Although there is no entrance hall, there is a closet nearby for the storage of coats. The living room is planned so it is undisturbed by the flow of traffic. The front and rear terraces provide outdoor living space in the summer time. A serving buffet between kitchen and dining room facilitates the serving of meals. A convenient cupboard for storing cleaning equipment and supplies is built on the back of the basement door. (Courtesy of *Good House-keeping Magazine*.)

space can be readily adapted to meet the changing needs of the family.

In making house plans, many combinations can be worked out that will give greater flexibility in the use of rooms. For instance, the living and dining rooms can be combined in order to increase the size and convenience of the living room. The dining area can be placed in an alcove off the living room, at one end of the room, or before a window. (See Figures 26; 27; 28; 30; and 33.) With this arrangement, the space when not used for dining is useful for other activities. The larger room that

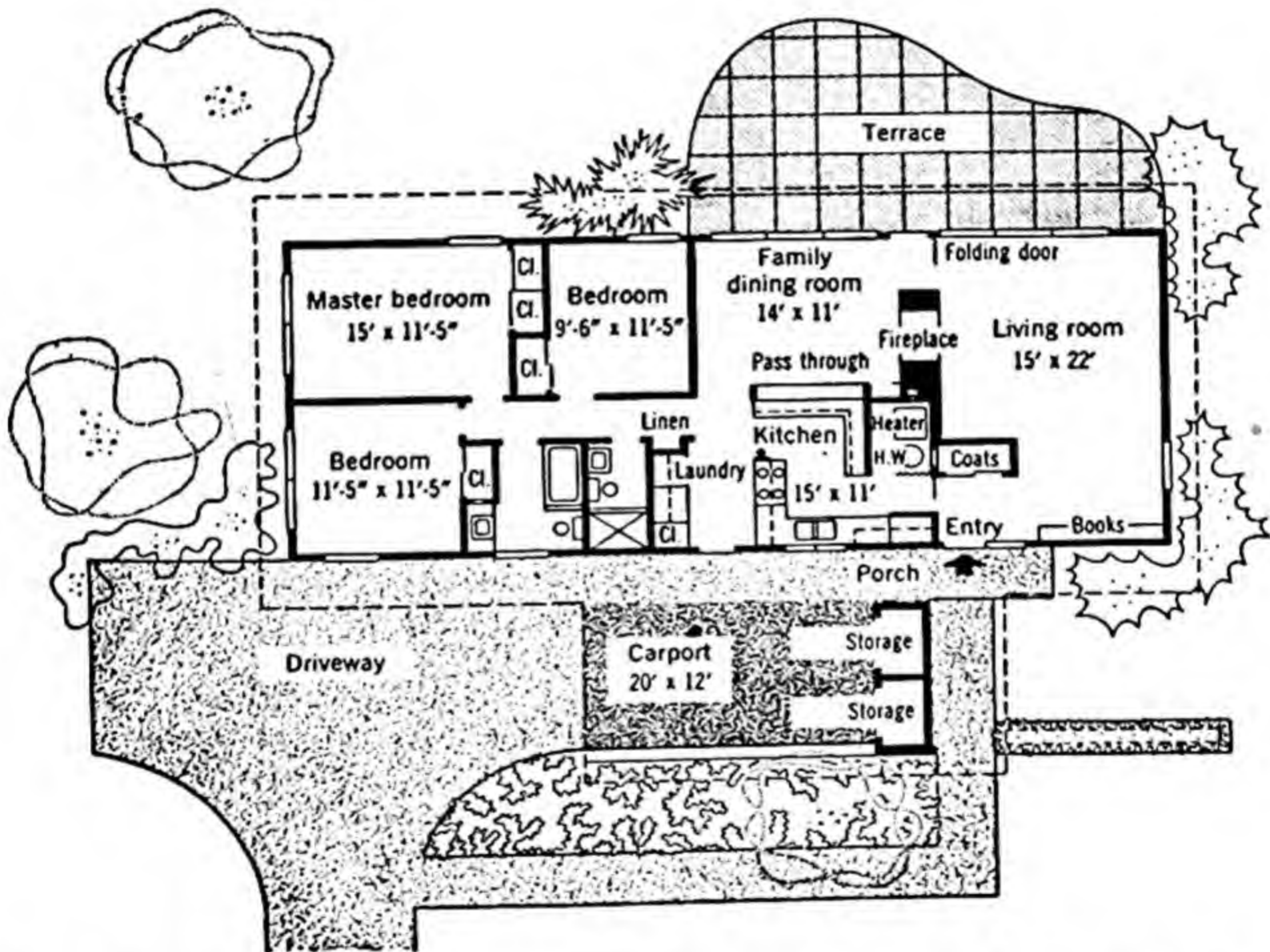
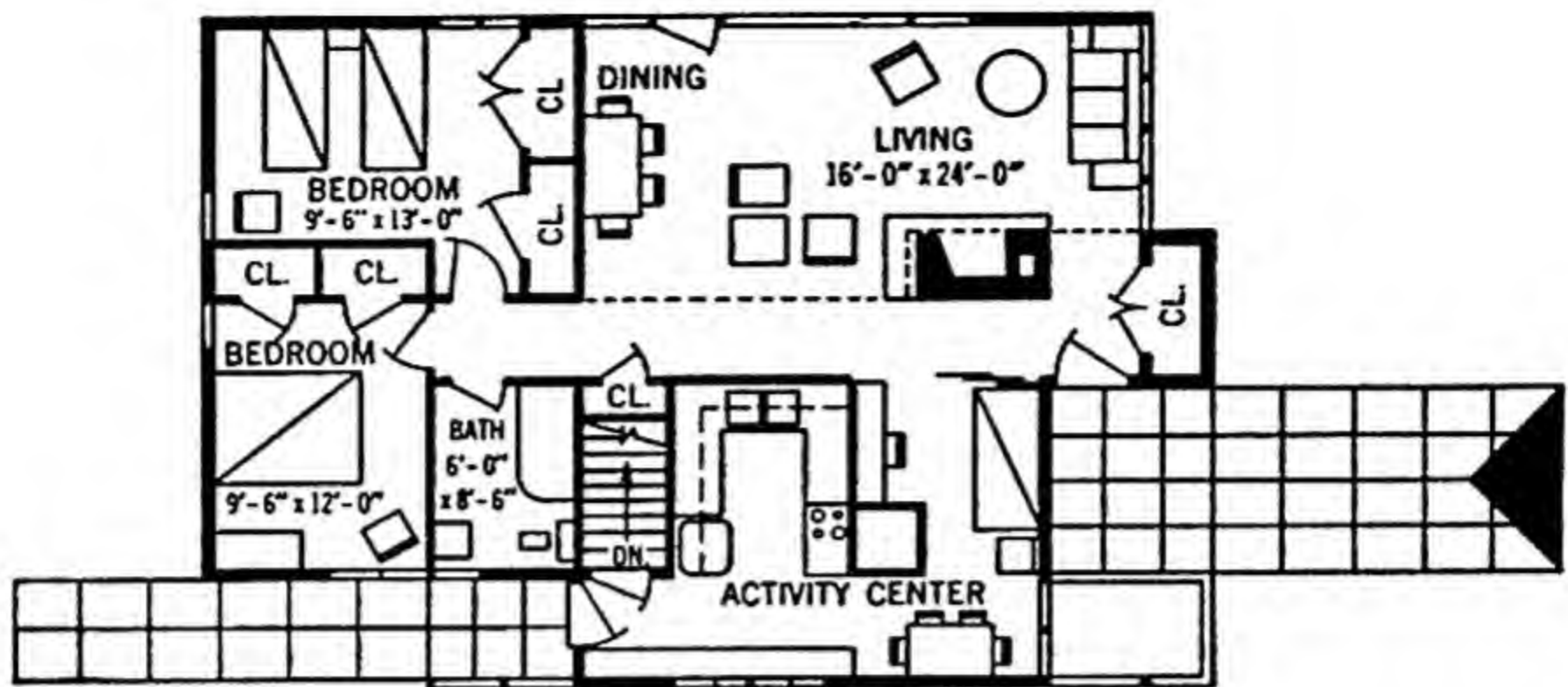


Figure 29. This plan is a good example of combined areas in a house. The dining-family room which opens to the rear terrace is linked to the kitchen laundry by a counter pass-through. Above and below the counter, on both sides, are shelves and storage cabinets. To the right is the living room, with a two-way fireplace that warms both rooms; to the left, three bedrooms and two baths. The carport, which is a part of the over-all design, provides additional storage and shelters the rear entrance. (Reprinted from *House and Garden*, Copyright 1957, The Condé Nast Publications, Inc.)



1

Basic plan with activity center



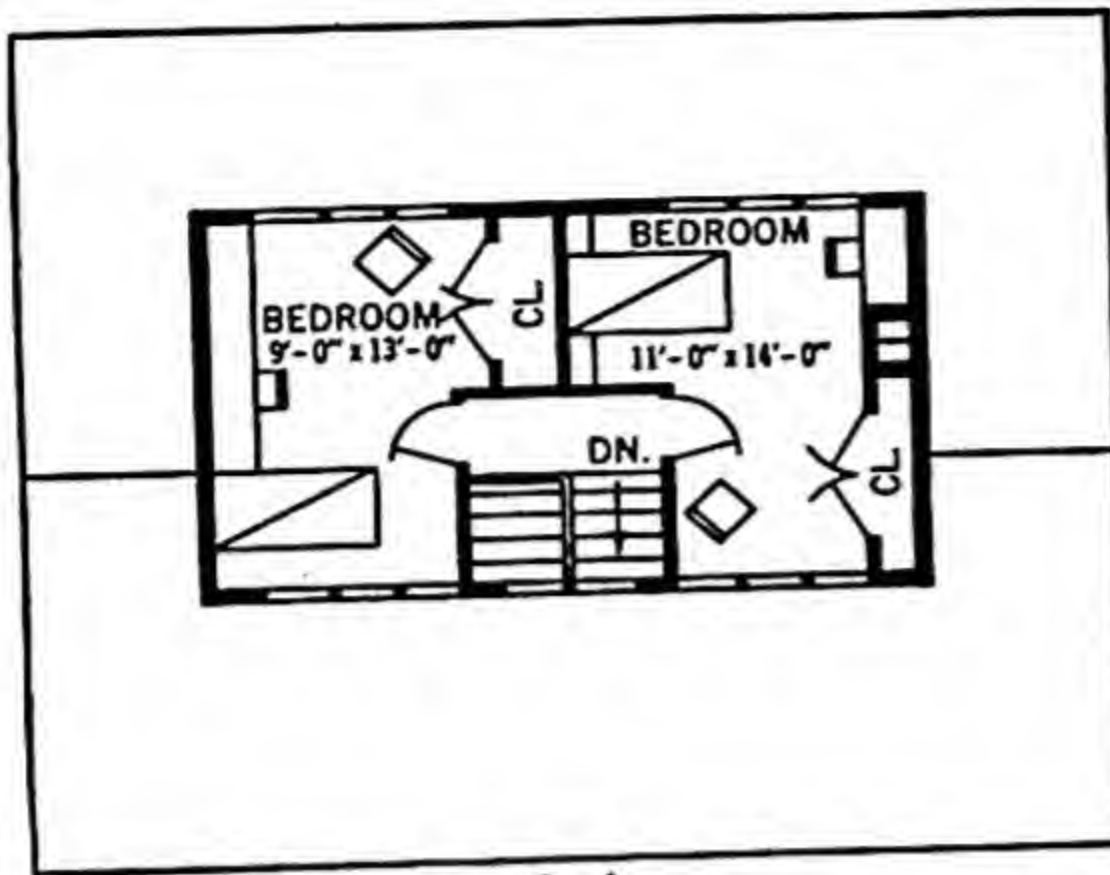
2

Activity center eliminated, stairway provided

Figure 30. This plan is designed for efficient and practical living. The living-dining and kitchen areas are suitable for family living and entertaining. The sleeping area is very compact and good storage space is planned for each bedroom. Excellent circulation is provided with minimum hall space. Each room in the house can be reached from the front door without passing through any other room. The adaptability of this plan is shown in the three schemes worked out for the activity center and the plan for expansion in the sleeping area.

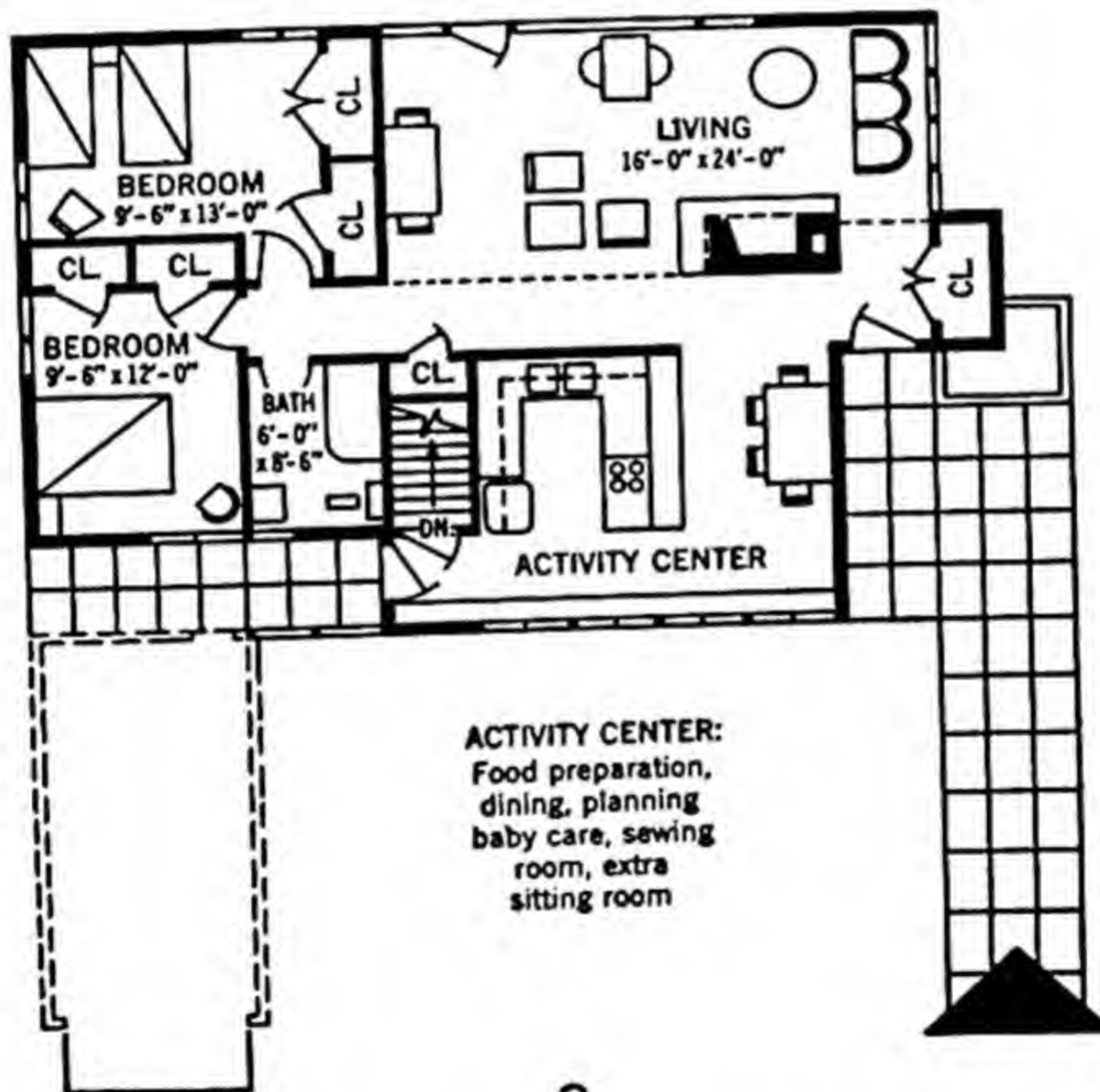
In *Plan 1* the kitchen is part of the activity center, which also includes space for a dining table, comfortable chairs, play pen, couch, writing desk, and sewing machine. The couch may be used by members of the family when guests are entertained overnight.

Plan 2 is an adaptation of the basic plan in which the activity center is eliminated and a stairway is provided to the second floor. By raising the pitch of the roof, it is possible to provide two bedrooms on the second floor, as shown in *Plan 2A*. An L-shaped kitchen and dining area are worked out in this arrangement.



2A

Pitch of roof raised to provide bedrooms



3

Dining area substitutes in activity area

Plan 3 is another interpretation of *Plan 1*. This change is one that might be made as children grow older and when they wish to use the activity center for entertaining their friends or for studying. It also provides an attractive living area where parents may work or relax when the children are using the living room. In this plan an attached garage is added at the rear corner. (Courtesy of Architect's Home Plan Institute, Minneapolis, Minn.)

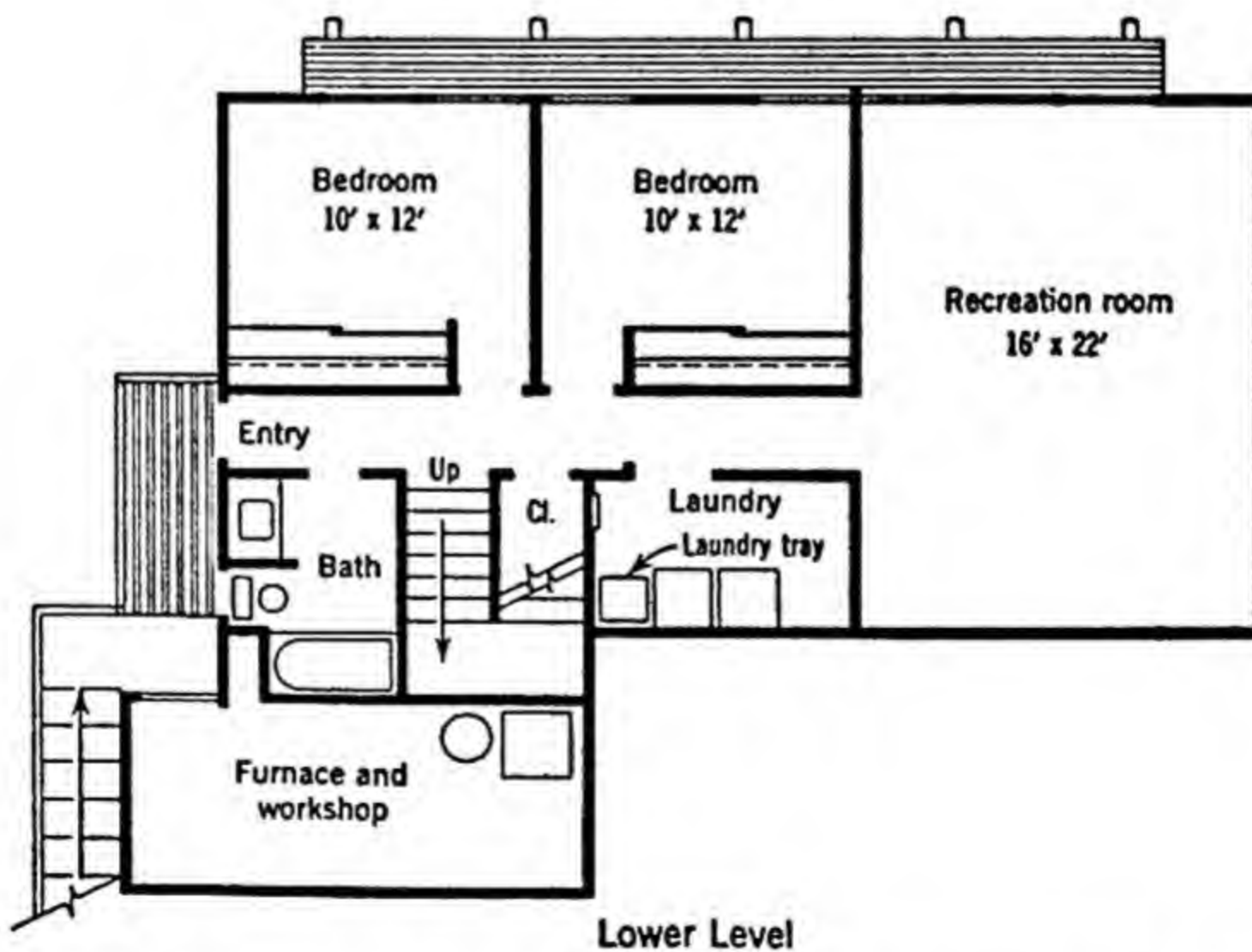
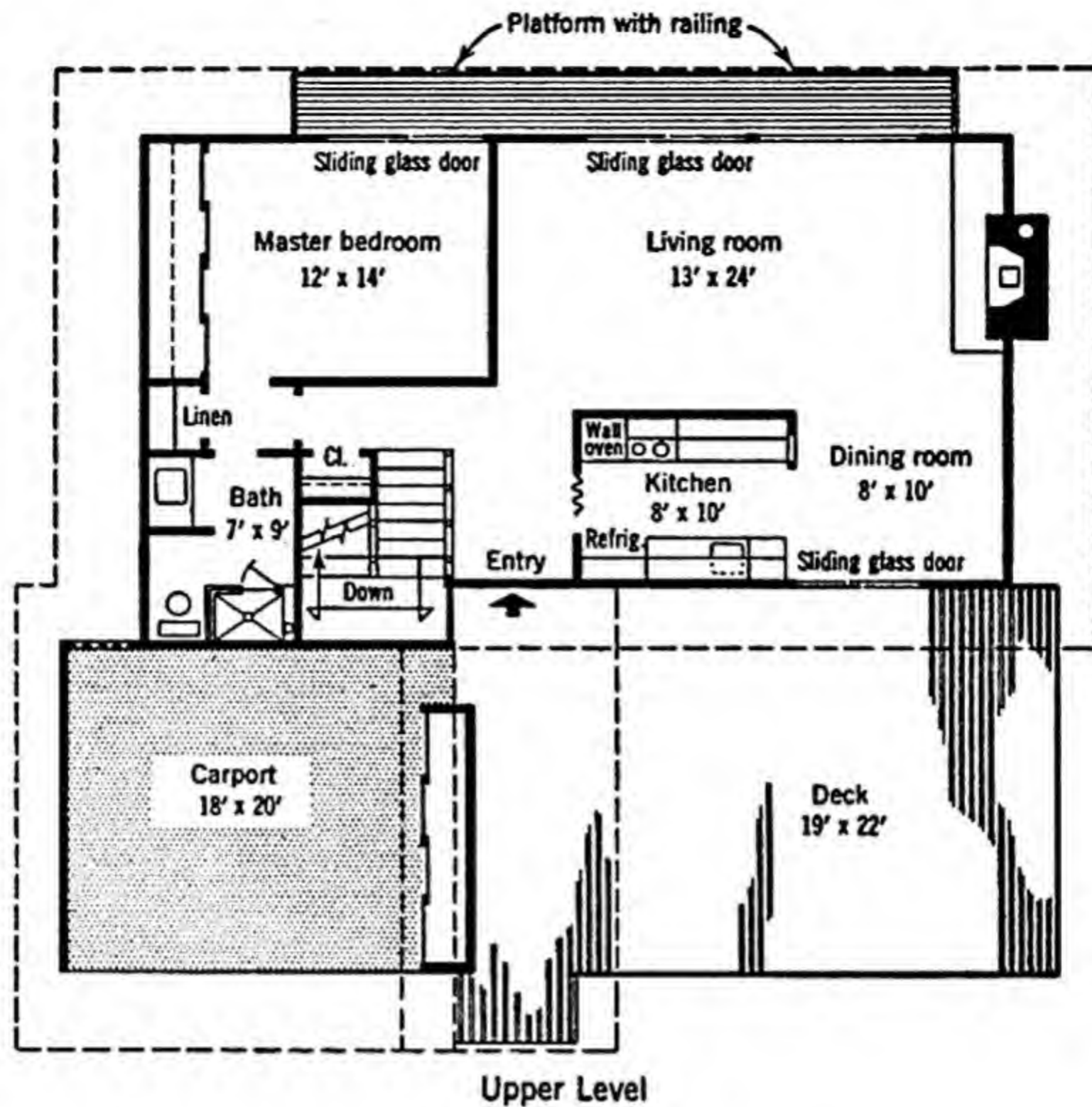


Figure 31. The design of this two-level house takes advantage of its hillside building site. The entrance to the carport and the house is from a private drive. The entry hall provides easy access to all rooms on the first floor, and to the stairs

results from combining the two areas gives a sense of spaciousness and is more adaptable to family needs.

A separate dining room may serve a number of purposes besides providing space for family meals and guest dining. When the dining table is one that can be folded and moved easily, the room may become a play room, a sewing or music room, a study, a convenient room for a convalescent, an overnight guest room, or a sitting room for an older member of the family or for parents when a group of children or young people are using the living room. A family dining room is shown in Figure 29.

A study on the first floor may sometimes be used as a dining room, guest room, sitting room, or play room. This room may be closed off from the rest of the house when a quiet area is needed by a member of the family. (See Figure 28.)

Today the bedroom is used for many more purposes than those of sleeping, dressing, and storage. When large enough it may serve as an individual living room, study, play, or hobby room. Closet space and bookshelves provide storage space for individual possessions.

Kitchens can be planned to include space for informal dining, play room for the small child, sewing space for "pick-up" work while food is cooking, and a compact laundry. Frequently, a kitchen is divided into cooking and dining or laundry areas by a central projection containing the stove or storage cupboards. A combined kitchen and dining room is generally adequate for the younger members of the family to entertain their friends. (See Figures 28; 30, Plans 1, 2, and 3; 32; and 33.)

In some plans the utility or heater room which houses the furnace and water heater includes space for the laundry, a play room, and workshop. In the farmhouse the workroom often

leading to the lower level. The spacious sundeck in an extension of the living-dining area. It is reached from a sliding glass door in the dining room, which adjoins the kitchen. A fence encloses the deck for privacy and makes the children's play area where it can be easily supervised. The glass windows at the rear of the house provide a view of the trees and hills in the distance. Two bedrooms and a bath and a large recreation room are built on the lower level. Large windows provide a view and light for these rooms, which can also be reached by an outside stairway. (House designed for John and Marguerite Dorsey, Berkeley, California, 1958.)

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7

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○

has a wash-up space, a room for desk and files, laundry, and food preparation. (See Figure 33.) A garage, if heated, may serve many purposes. It is often used as a workshop, a play room, and a place for drying clothes.

Flexible planning calls for the duo- or multi-purpose use of rooms. Some of the most convenient combinations are:

Living room—dining room

Dining room—family room—all-purpose room

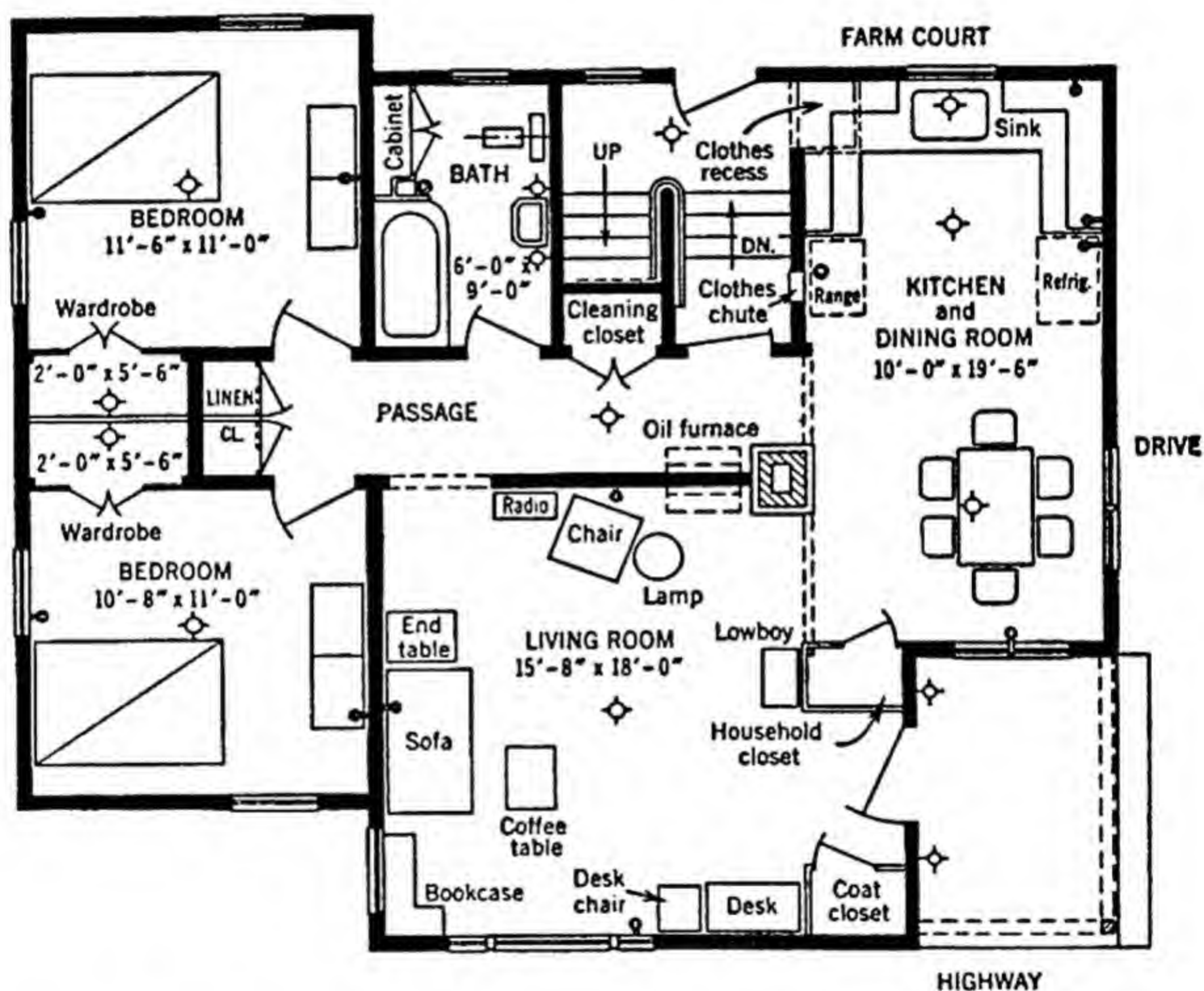


Figure 32. This farmhouse plan is designed to meet the needs of the small family. The work and dining areas have been combined to save space. The kitchen is planned so that no traffic crosses the work area. In the dining area there is space for children to play and study, and good light for reading and sewing. From the back entrance it is possible to go directly to the washroom and laundry in the basement and to all of the rooms in the house. Ample storage facilities are planned for each area, and each room has cross-ventilation. The front entrance faces the drive, and the kitchen windows give a fine view of both the drive and farm buildings. (A Plan for a Small Farm House, *State Coll. of Wash. Agr. Ext. Circ. 113.*)

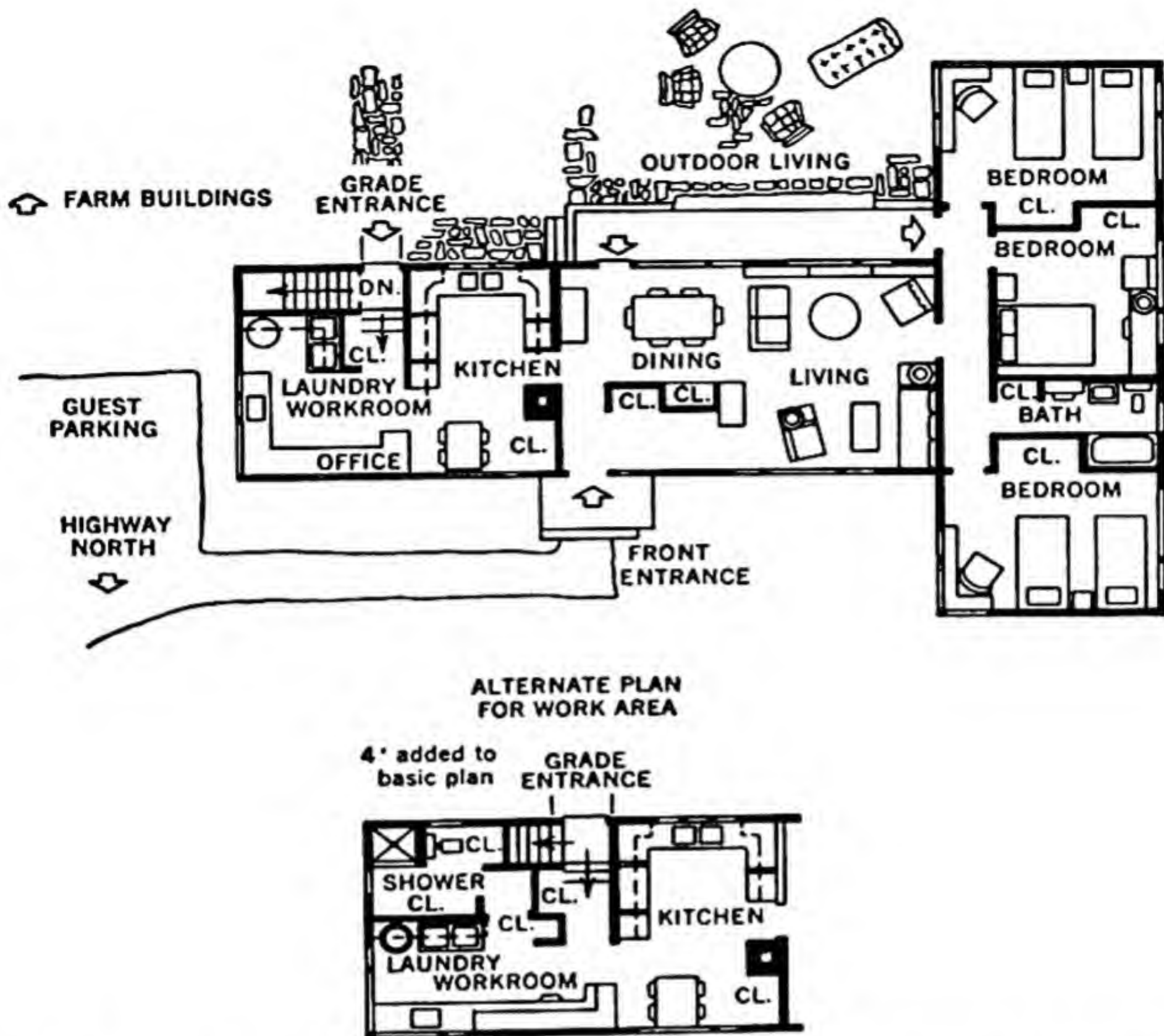


Figure 33. This farmhouse consists of two rectangles. One includes living and dining areas, kitchen, workroom, and storage spaces. The other includes bedrooms and bathroom. The living-dining area is well suited to family living on the farm. A storage cabinet separates these areas from the entryway. In the bedroom wing each room is separated from the next one by a storage wall, permitting one, two, three, or more bedrooms without change in plan arrangement. A door in the hall permits entrance to the sleeping area from outdoors. The workroom adjoining the kitchen and rear door has a convenient wash-up space, room for desk and files, space for laundry, and work space for preparing food and getting produce ready for market. The entrance to the basement and workroom is at grade level. The U-shaped kitchen keeps traffic out of the homemaker's way. The table in front of the windows provides another place to eat. The closet nearby with space for a sewing machine and full-length mirrors on the doors also makes this a convenient place for sewing. Both the front and rear doors are handy to the drive, and it is only a few steps from the kitchen to either door. Well-placed windows give unusually good light and excellent ventilation. The windows in the kitchen look out both on the rear yard and the highway in front of the house. The basement includes a place for a complete clean-up and clothes change, and an all-purpose room. The alternate plan for the work area shows how a clean-up room can be put on the first floor. (Reprinted by permission of the University of Illinois Small Homes Council from its copyrighted publication, *A Basic Farmhouse Plan*, Circular C7.2, 1947, p. 3.)

Kitchen—dining space—laundry—sewing—play area—space for bathing the baby

Study—guest room—dining room—play space

Dinette—play room—study area—writing room

Guest room—sewing room—study—game room—sitting room

Bedrooms—sitting room—sewing space—private area for writing, reading, studying, child's play space, light ironing

Child's room—guest room (child to give up room temporarily)

Workroom—laundry—sewing—play room—workshop

Utility room—workshop—laundry—play room

Garage or carport—workshop—play room—drying room for laundry—storage space for garden and yard tools, screens, play equipment, bicycles, and camping equipment

§

What Kind of House Does the Family Need?

Before a house or apartment is rented, or before a plan for a new house is selected, the housing needs of the family should be given careful consideration. The size and composition of the family, the family's living habits, the activities to be carried on in the household, the space needed for articles of furniture, and the family's future housing needs all affect the amount and kind of space required for housing the family.

The size and composition of the family have an important bearing upon space planning in all activity areas in the house, since the plan should fit the family. The number and sex of the children will determine to some extent the number and size of the bedrooms, and the presence of others not members of the immediate family may mean additional space in certain areas of the house. A second bathroom or extra lavatories may be needed if the family is large.

The family's living habits determine many of the family's housing needs. The extent and manner of entertaining will have an important effect on the size of the dining room, the living room, and possibly the kitchen. The family's interests in recreational and creative activities will determine the amount of space allotted to rooms for these activities. All houses that are carefully planned are an expression of the family's pattern of living.

The activities to be carried on in the household also affect the housing needs of the family. If the laundry is to be done at home, special provision must be made in the basement or on the first floor. If fruit and vegetables are canned in quantity, extra storage space outside the kitchen will be needed. In the farm home, a workroom which has room for a desk and files, a convenient wash-up space, a laundry alcove, and a work space for preparing food and getting produce ready for market is essential.

The plan may also be affected by the furniture for which wall and floor space must be provided. The size and placing of the pieces of furniture that a family may already have or pieces they expect to buy should be thought of in relation to the size and shape of wall spaces and the placing of the pieces of furniture in each room of the house. All rooms should be large enough to allow ample free space after the placing of the necessary furniture.

Both present and probable future housing needs should be considered. In most families these needs change during the family cycle, and only through careful planning can houses be made flexible enough to meet these various changes.

The newly married couple will need less room than a larger family, and it may be necessary for them to take care of the change in family size by moving to a larger house, or by planning additions to their present home. The family whose children are small and whose income is limited may find it necessary to get along with less space during the first years. Later extra space may be added by finishing rooms on the second floor or in the attic or basement, or by building another room on the house. On the other hand, the family whose children are half grown must be careful not to overbuild lest they be left with more room than they can care for when the children are gone. If such a large house is built, they should do so with the thought of its resale value or the future possibility of making it into apartments. Such an adjustment not only reduces the space to fit the smaller family but also adds to the family income.

The kind of house the family needs can best be determined by making a list of the rooms and storage areas considered neces-

GUIDE FOR CHECKING FAMILY HOUSING NEEDS

Recreation Activities

Recreation and entertaining

- ☐ Living room
- ☐ Living room-dining room
- ☐ Recreation-utility room
- ☐ Basement recreation room
- ☐ Sun room or porch
- ☐ Terrace

Reading and relaxing

- ☐ Living room
- ☐ Study
- ☐ Bedrooms

Music

- ☐ Living room
- ☐ Recreation room

Dining room

- ☐ Dining room
- ☐ Dining area in kitchen
- ☐ Dining area in living room
- ☐ Terrace or porch

Play space for children

- ☐ Family room
- ☐ Kitchen
- ☐ Utility-play room
- ☐ Bedroom
- ☐ Terrace
- ☐ Porch
- ☐ Garage
- ☐ Yard

Household Activities

Preparation of food

- ☐ Kitchen
- ☐ Workroom

Laundry

- ☐ Utility or workroom
- ☐ Kitchen
- ☐ Basement

Sewing

- ☐ Sewing room
- ☐ Dining room
- ☐ Kitchen
- ☐ Sewing-laundry room
- ☐ Bedroom
- ☐ Utility or workroom

Housecleaning

- ☐ Storage closets

Workshop (tools, paint, varnish, etc.)

- ☐ Garage (attached)
- ☐ Basement
- ☐ Utility room or workroom

Household help

- ☐ Maid's room
- ☐ Bathroom

Planning and account-keeping

- ☐ Kitchen desk
- ☐ Dining area in kitchen
- ☐ Living room

Rest and Personal Activities

Sleeping and dressing

- ☐ Bedrooms
- ☐ Sleeping porch
- ☐ Dressing room
- ☐ Bathroom

Hygiene

- ☐ Bathroom
- ☐ Lavatory
- ☐ Shower
- ☐ Wash-up space near rear door
- ☐ Wash-up room in basement

Personal interest activities

- ☐ Study
- ☐ Bedroom
- ☐ Recreation room
- ☐ Utility or workroom
- ☐ Garage workshop (attached)

Overnight guests

- ☐ Bedroom
- ☐ Study
- ☐ Recreation room
- ☐ Living room

GUIDE FOR CHECKING FAMILY HOUSING NEEDS (Cont.)

Storage Needs and Spaces

Automobile

- ☐ Garage
- ☐ Carport

Clothing worn every day

- ☐ Front entrance closet
- ☐ Rear entrance closet
- ☐ Bedroom closets

Clothing—seasonal

- ☐ Hall closet
- ☐ Attic

Bed linen and towels

- ☐ Hall closet

Bath towels and supplies

- ☐ Bathroom closet
- ☐ Hall closet

Heavy bedding

- ☐ Hall closet
- ☐ Bedroom closets
- ☐ Attic

Food supplies and kitchen equipment

- ☐ Kitchen cabinets and drawers
- ☐ Workroom
- ☐ Basement

Garden and yard tools

- ☐ Basement
- ☐ Garage

Storm windows and screens

- ☐ Garage
- ☐ Basement

China and silver

- ☐ Dining room cupboards
- ☐ Kitchen cabinets and drawers

Cleaning equipment and supplies

- ☐ Rear hall closet
- ☐ Kitchen closet
- ☐ Hall closet—second floor

Games, books, papers, records, etc.

- ☐ Living room
- ☐ Study
- ☐ Recreation room

Children's play equipment, bicycles

- ☐ Rear porch closet
- ☐ Garage

Sports equipment

- ☐ Hall closet
- ☐ Study
- ☐ Recreation room
- ☐ Utility or workroom
- ☐ Attic

Trunks and suitcases

- ☐ Basement
- ☐ Closet—second floor
- ☐ Garage storeroom
- ☐ Attic

Fuel supply

- ☐ Basement coal bin
- ☐ Outside oil tank

Firewood

- ☐ Basement
- ☐ Garage
- ☐ Closet beside fireplace

sary for the different family activities. With this information the family should have a basis for judging whether a plan meets the needs and desires of the group. The check list presented on pages 376 and 377 may be used in making this record.

How to Choose a Desirable House Plan

When a number of desirable house plans have been found, a detailed study of each one should be made to see which is best suited to the family's needs and desires. These plans may be from books of a plan service, magazines, newspapers, or preliminary sketches made by the family or an architect. In selecting such plans the family will find it advisable to limit themselves to those which fall within the cost range that the income allows. When this is done, it is easier to see what the family's money will buy, and there is less danger of planning beyond that amount. Many of the disappointments in planning and building arise from the fact that the family's first plans often exceed what they can afford to spend on housing.

The relation of the major activity areas, the serviceability of halls and stairways, and the locations of doors and windows can be tested by imagining the conditions under which the house will be used. The routes used in reaching the different rooms can be traced on the plan and studied. The following suggestions are given for studying and testing the livability, workability, and adaptability of any plan in relation to the major activities of the family.

Studying and Testing Plans

1. Check the family's housing needs (see page 376) with each of the plans being studied, and note how many of the features desired by the family are found in the plans or how many might be included.
2. Trace the plans that seem most desirable or make enlarged drawings on barred paper.
3. With different-colored pencils draw a line around (1) the recreation area, (2) the work area, and (3) the rest area on the plan.
4. Study the amount of space devoted to the activity areas to see if the plan will meet the needs of the family.
5. Study the location and the relationship of each area, keeping in mind the possible lot on which the house may be built. The facing of the lot, the prevailing breezes, and the size and shape of the lot and the surroundings will determine in part the most suitable arrangement of the rooms and the garage.

6. Test the circulation or communication between the rooms in the different areas by tracing with a pencil the lines of traffic.

7. Using the different drawings of floor plans, spend an imaginary week in each house studying and testing the usability, workability, and adaptability of plans. By means of different-colored pencils, trace the routes traveled in performing such activities as cleaning the house, washing and ironing, or preparing a simple meal.

8. On another floor plan, trace the routes that the children take in getting on their wraps and going out to play, in getting out their play equipment, and in coming into the house and going out again. Other activities of the children may be studied in similar fashion.

9. On another plan trace father's goings and comings and recreational activities, or better still let father do it, and if the children are old enough they can make their own tracings.

A study of the floor patterns of each of these imaginary tests will quickly show the routes that must be traveled and the lines of greatest traffic in the house. If the routes traveled by the various members of the family as they come and go about their activities in the house are short and direct, the plan has possibilities and may prove satisfactory. If on the other hand the routes are long and circuitous, the plan should be discarded.

Doors and Windows

Since doors provide access to the different areas of the house, some thought should be given both to their location and to the direction in which the doors swing. Well-located doors provide easy circulation throughout the house. Doors which open in the wrong direction are inconvenient to use and frequently take up valuable wall space in the room.

The location of windows is important from the standpoint of light, ventilation, appearance, both inside and outside the house, and intervening wall space. Well-proportioned wall spaces between windows and between windows and doors should be sought in each room in order to give ample space and a pleasing background for the necessary pieces of furniture. One large window or the grouping of a number of windows is often desirable when the view from the house is one that is enjoyed.

Size of Rooms

The most satisfactory size for the different rooms in the house is dependent upon their use and the furniture and equipment that must be placed in each room. When living and dining rooms are planned to serve more than one purpose, they should be large enough for all the activities to be carried on in these areas. Bedrooms, bathrooms, kitchens, and laundries or work-rooms can be exactly determined in size by the dimensions of the furniture and stationary equipment and their use.

Each family should choose room sizes to fit their needs. The following room sizes are well proportioned and convenient for placing furniture and equipment. They will serve as a guide for the average family.

DESIRABLE ROOM SIZES (IN FEET) ***Living Room**

12 x 16

14 x 21

14 x 24

Bedrooms

10 x 12

12 x 14

Dining Room

12 x 12

12 x 15

Dining Alcoves in Living Room

8 x 12

10 x 10

Dining Area in Kitchen

4 x 8½ (4 people)

4 x 6 (2 people)

Dining Alcove in Kitchen

8 x 10

8 x 12

Kitchens

7½ x 10 (2-wall type)

8 or 9 x 12 (broken U-type)

10 x 12 (U-shaped)

Laundry or Utility Rooms

10 x 12

12 x 15

Hall Widths

3 to 4

Bathrooms

5 x 7

7 x 8

Stair Widths

3 to 4

Passage Space

2½

* Esther Pond and Stanley A. Smith, *Planning Your Home*, State Coll. Wash. Ext. Bul. 352, 1946, p. 11.

Checking Plans for Furniture Arrangements

When a plan has been selected which meets the family's needs for space and satisfies the other requirements, some thought should be given to planning the arrangement of the furniture. Effective grouping of furniture helps the family make the best use of the space they have to live in. Since most rooms serve several purposes, furniture should be grouped and combined so that it will take care of all of them. (See Figures 30 and 33 and page 406.)

A good way to do this is to cut out paper patterns of each piece of furniture, using the same scale as the plan. These cut-outs or paper patterns may be used to test both the floor space and wall space of the room. By moving the furniture patterns around on the plan it is easy to find the most satisfactory locations and combinations. The placement of furniture on the plan will show if the doors and windows are well located and if the doors swing in the proper direction. It will also indicate where electric light outlets should be located and where pieces of furniture will interfere with circulation routes.

Drawings of furniture cutouts may be found in a number of books.⁶

Planning an Efficient Work Area

The work area should be planned to eliminate the expenditure of excessive time and effort in doing the daily work. By careful thought and planning, the equipment in this area can be designed and arranged to achieve this end.

The first step in developing a successful plan is to determine the activities for which the kitchen is to be used. Although the main purpose of the kitchen is to provide equipment for the preparation and serving of food, many families find it convenient to include dining space in the kitchen, and also a place where small children can play and where adults can rest and sit at work. In small houses it is often necessary to provide space for laundry equipment in this area.

⁶ Sleeper and Sleeper, *op. cit.*, pp. 179-183.

Kitchen Activities and Work Centers

The major kitchen activities—food preparation, cooking and serving, and cleaning up—center about the refrigerator, range, and sink. Arranging a kitchen for efficiency and convenience automatically divides it into three work centers. Equipment used for dining and family activities may be grouped in another center.

The four centers are:

1. The mixing center—the refrigerator with adjacent work counters and cabinets.
2. The range center—the range with the adjacent serving counter and cabinets.
3. The sink center—the sink, dishwasher and sink disposer with adjoining counters and cabinets.
4. The family living center—a table for eating and studying, a comfortable chair for reading, mending, baby tending, and relaxing, a play corner for children's toys, and a planning desk.

In all kitchens it is important to have these work centers and the dining table conveniently located with the shortest distance between them. In addition, each center should have adequate working space and storage facilities for the tools and supplies used in that particular place. When the three work centers are grouped as nearly as possible in the sequence in which they will be used, the various processes of food preparation will flow along in an orderly manner from one center to the next. Kitchens are usually planned for work to progress from right to left, since most right-handed homemakers prefer this.

The mixing center is most convenient when the refrigerator is placed to the right of the adjoining work counter with the door opening on the side nearest the counter. This arrangement provides a space for setting foods brought from market while they are being sorted and stored in cupboards, bins, or refrigerator. It also gives a place near the refrigerator for mixing and preparing foods, arranging salads, and making beverages. In this center a lower work counter, pull boards below the counter, and a lap table are desirable features.

The cooking processes center about the range. One of the

important features in this center is a work surface sufficiently large for placing hot dishes or pans of food as they are taken from the oven or top heating units, for cooling pies and other baked foods, and for placing serving dishes for the last minute dishing-up. Having the cooking and serving center near the dining area speeds the serving process.

The sink plays an important part in all kitchen activities as well as being the center for cleaning up after meals. Food preparation involves the washing of fruits and vegetables, and both food preparation and cooking require the frequent use of water and the constant washing of tools and utensils. Hence the sink should be easily accessible to the other work centers, the dining table in the kitchen, or the entrance to the dining room.

The sink may be either single or double, with work surfaces on both sides. There should be sufficient space on the right-hand counter to stack all soiled dishes. Often the work counter in the mixing center serves as a part of the stacking space. The counter at the left of the sink is used both for working and placing clean dishes for drying. A space of 36 inches at the right of the sink and at least 32 inches at the left is recommended by Wilson. (See Table 9, page 173.)

Kitchen Arrangements

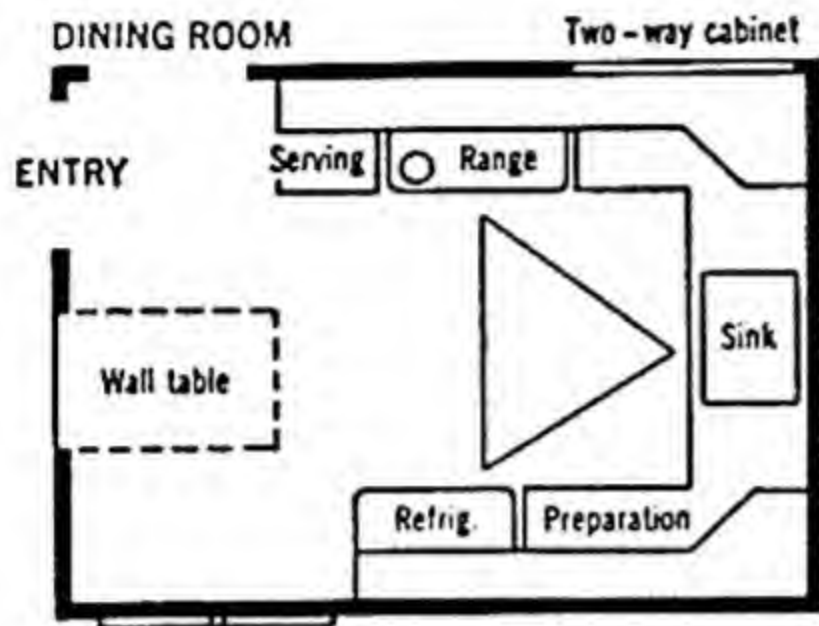
The arrangement of the equipment into work centers in the kitchen is influenced by the shape and size of the kitchen and the location of the doors and windows. The equipment may be arranged in a U-shaped plan, an L-shaped plan, a broken U-shaped plan, a two-wall plan, or a one-wall plan. (Figures 34; 35; 36; 37; 38.)

When two people are to work in a kitchen a distance of 4½ feet between equipment on opposite walls is recommended by McCullough.

In the U plan (see Figures 30, Plan 1; 32; 33; and 34) the equipment may be arranged in a continuous working surface around the three walls of the room. In this type of kitchen, food preparation flows along easily from one work center to the next. With this arrangement one end of the kitchen may

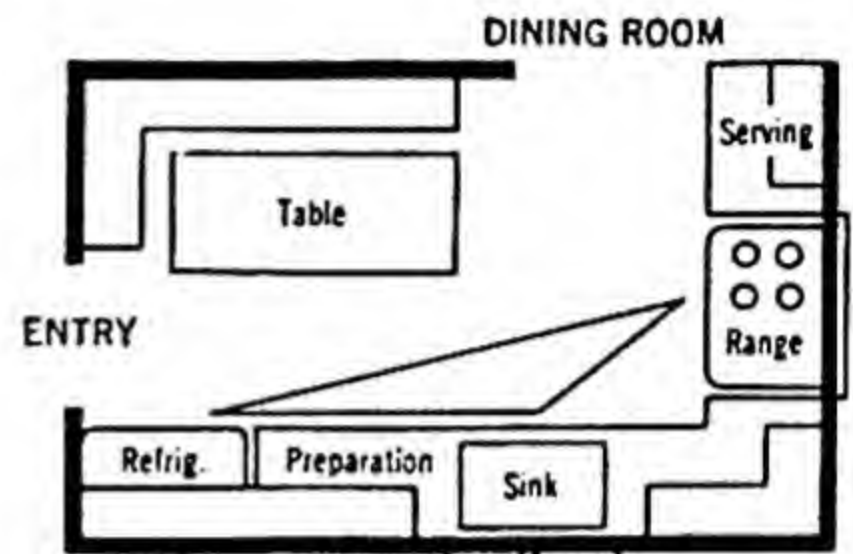
Kitchen Arrangements

Work triangle shows the line of travel between the refrigerator, sink, and range in each kitchen arrangement. A step-saving triangle measures not more than 22 inches around three sides.



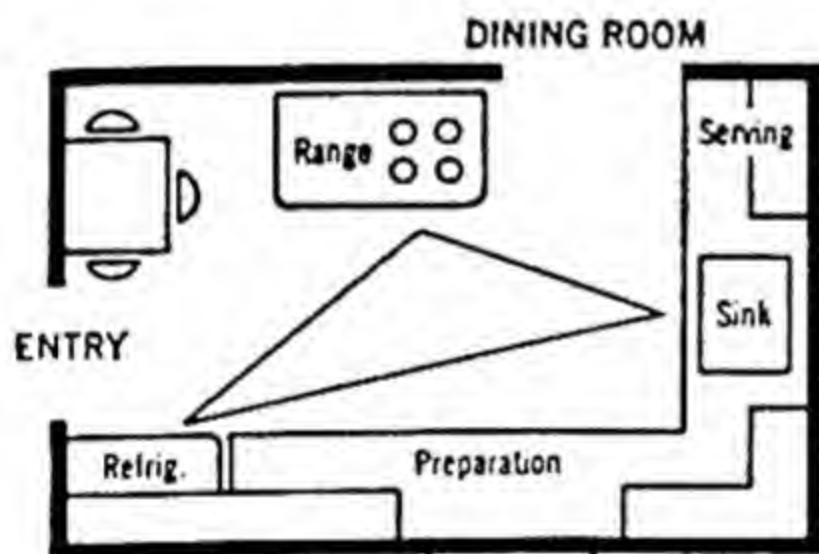
U-SHAPED KITCHEN

Figure 34.



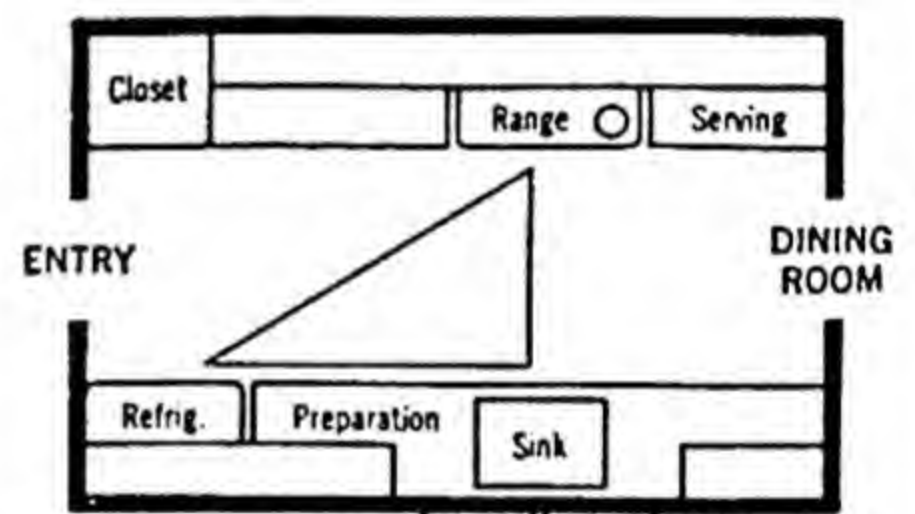
L-SHAPED KITCHEN

Figure 35.



BROKEN U-SHAPED KITCHEN

Figure 36.



TWO-WALL KITCHEN

Figure 37.

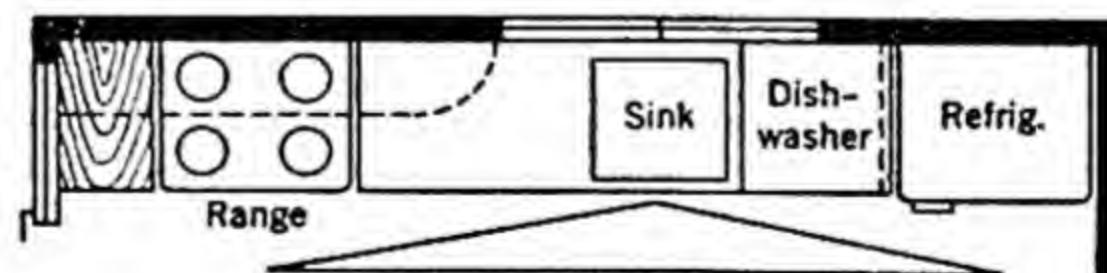


Figure 38. One-wall kitchen.

be left free for dining space and other activities. To facilitate dining room service and save steps, a two-way storage cupboard and open counter space may be used between the kitchen and dining room. (See Figures 28 and 29, and page 386.)

The L plan allows the equipment to be placed on two adjacent walls, leaving the other walls, if not broken by doors and windows, for dining space. (See Figures 35 and 30, Plan 2.) This plan allows more space for the family living center.

In the broken-U plan the equipment is arranged on three walls but it is not continuous. The wall space is broken by a door which makes a break between the major pieces of equipment. This arrangement leaves a corner that may be used for dining space and other activities. (See Figures 26; 27; and 36.)

In the two-wall plan the equipment is placed along parallel walls. Various arrangements are possible in such a plan, but there is little room for a table for kitchen dining. Draw tables or pull-out boards below the counter may be used for an occasional meal or for serving lunches to the children. When there are doors at either end, the center needed for working becomes a passageway. (See Figures 31 and 37.)

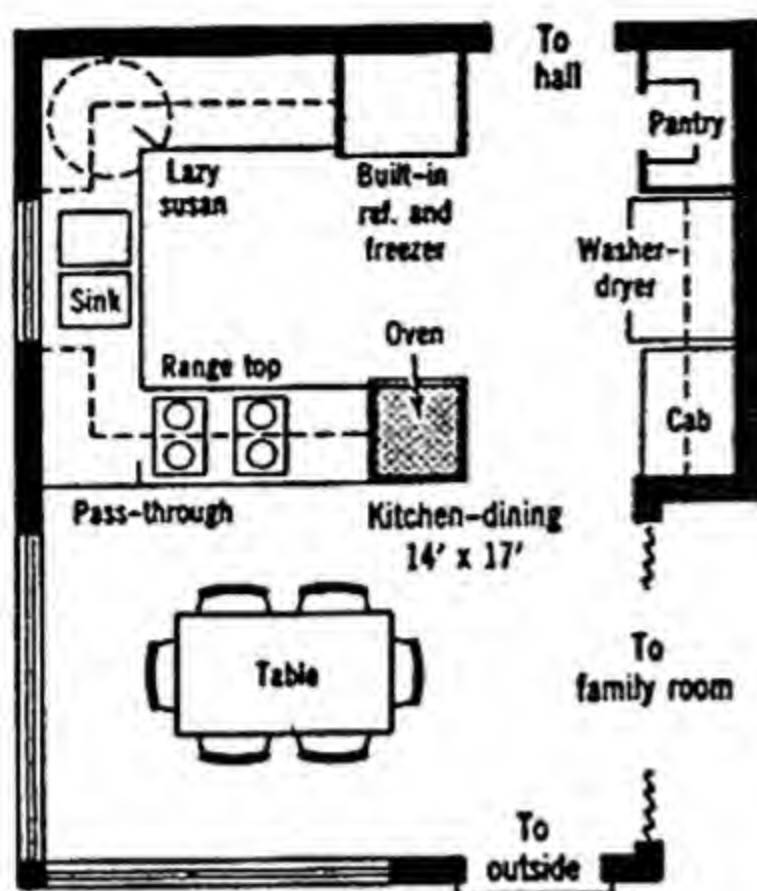
One-wall kitchens are generally used in apartments or small houses where space is limited. By placing the refrigerator and stove at opposite ends, a continuous work surface may be planned. (See Figure 38.)

The separate-center kitchen is one in which wall spaces are broken by doors and windows so that work centers must be separated. Arrangements of this kind cause extra walking and endless inconvenience.

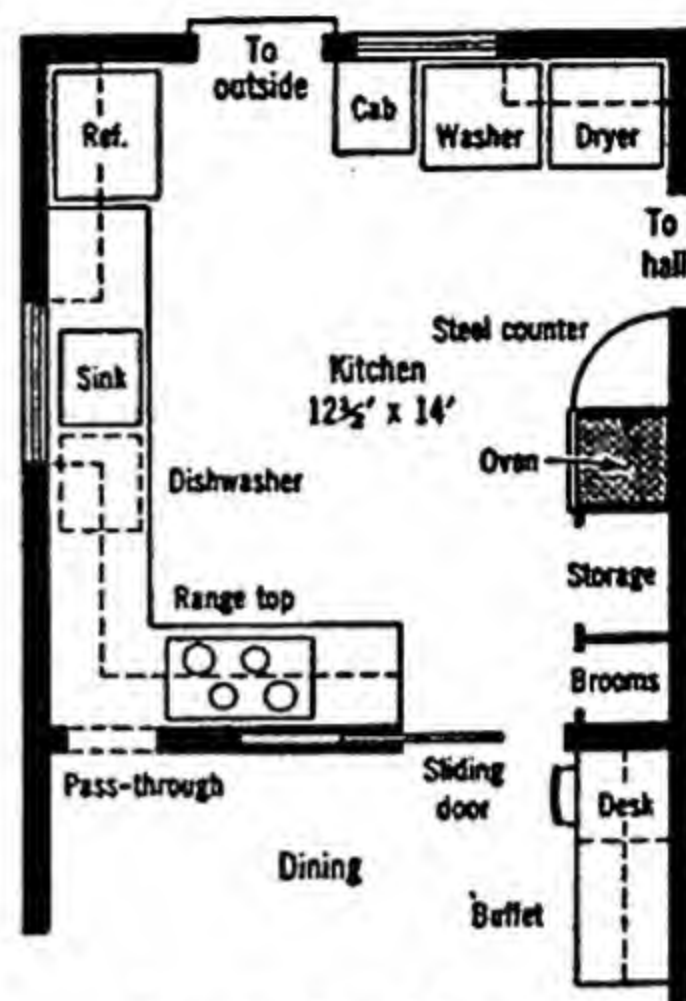
If a kitchen is large or combined with the dining or laundry areas, an island or peninsula can draw the kitchen centers closer together and also divide the work area from the other areas. Both the peninsula and island arrangements add counter and storage space. Sink and range units may be installed here, and wall cabinets suspended. (See page 367.)

The trend to built-in ovens and counter top burners is adding greater flexibility to kitchen arrangements. Separating the range top from the oven means that these two units can be placed at different locations in the kitchen. The built-in oven

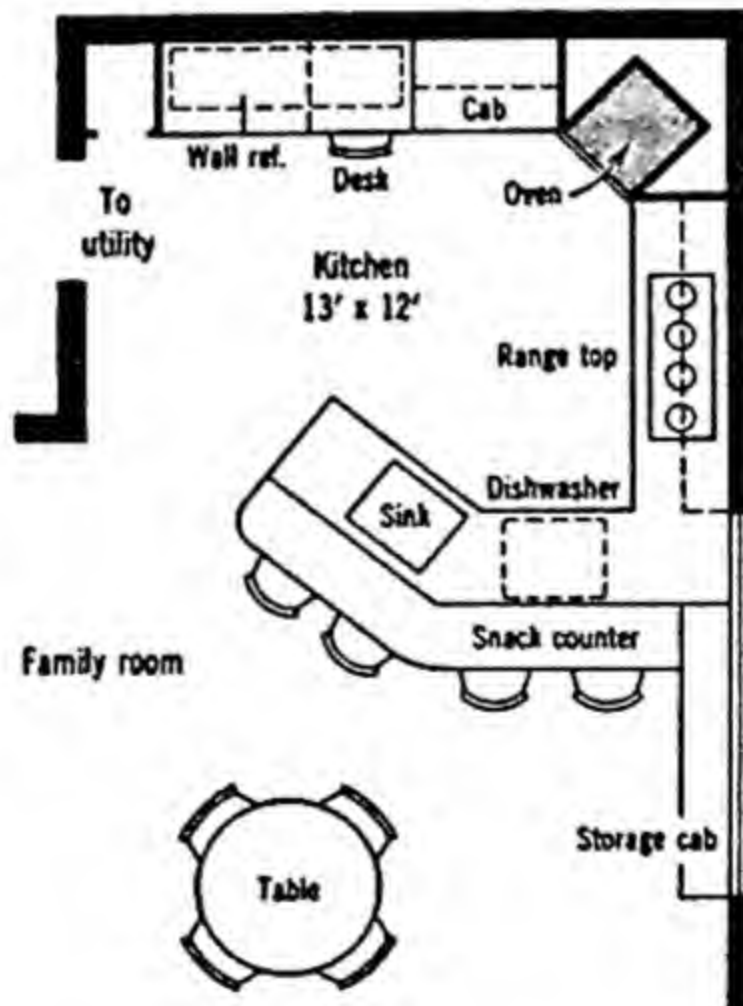
Three Ways to Arrange a Built-in Oven*



Oven is close to range top and serving center, but not in main work area.



Oven is placed in a separate center with an adjoining counter.



Oven is installed in a corner. Here it shares the work load with cooking and mixing centers

* Planning Tips for the Built-in Oven. (*Better Homes and Gardens Home Building Ideas Book* of 1958. Copyright, 1958, Meredith Publishing Company, Des Moines, Iowa.)

can be installed at a convenient height for the homemaker to use and clean without bending or stooping.

The separate cooking top can be built into the counter near the oven, or it can be fitted into a cooking center on a peninsula or island in the center of the kitchen. Storage space can be increased in kitchens with this arrangement, since space becomes available underneath both the oven and the cooking unit.⁷ Heat-proof counter space should be provided adjacent to both the oven and the cooking unit where hot dishes can be placed. (See page 386.)

A study to determine good locations for the separate oven was made by McCullough and Schoepel in 1956.⁸ Motion studies involving the baking of cookies and the preparation of oven meals were conducted. In making these tests the oven was placed in eight different locations.

The results of the study showed that good locations for a built-in or separate oven are:

Opposite the sink and mixing centers.

Next to the serving center.

In a separate center.

In a corner between two work centers.

The number of doors and windows in a kitchen determine the amount of space available for placing equipment. Traffic through the kitchen is controlled by the placement of doors. When possible, doors to the kitchen should be limited to two in number, and these should be placed so that the traffic route will not interfere with kitchen activities. Plans in Figures 34 and 35 show the best use of doors. In both plans, the refrigerator, sink, and range are compactly arranged outside the direct traffic route. Doors should swing in the most convenient direction and against unused wall space if possible. The window area should be sufficient to supply adequate natural light on working surfaces and plenty of fresh air and ventilation in the kitchen.

⁷ Edith Ramsay, "Before You Plan That Kitchen," *The American Home* (September, 1956), pp. 63-67.

⁸ Helen E. McCullough, and Martha S. Schoepel, *Separate Ovens*, The University of Illinois Small Homes Council, Circular C5.33, 1956.

In all kitchen planning a study of routings between work centers to check the distances walked in doing different tasks is desirable before permanent arrangements are made or extensive remodeling is attempted. The larger pieces of kitchen equipment can be drawn to the scale of the floor plan and shifted about to determine the best arrangement. The efficiency of any plan may be tested by the imaginary preparation of some article of food, or washing and storage of dishes after a meal is served. Routings between the work centers in the various kitchen processes, as well as steps taken in each work center, will indicate the most efficient grouping of equipment. The plans on page 159 show the value of such a study.

Kitchen Storage Arrangements

To save steps and motions in kitchen work, all equipment and supplies should be conveniently stored at the work centers where they are first used. In planning for adequate, well-designed storage space, the homemaker will need to decide before cabinets are built or before kitchen units are selected the amount of storage and work space needed, and how the storage space, both below and above the working surface, is to be used. This can best be done by (1) listing the utensils and food materials that must be stored in each of the work centers in the kitchen; (2) deciding where in the center the utensils and supplies are to be stored to save the most motions and lifting; and (3) the amount of storage space required for the various articles and supplies.

Heiner and McCullough suggest that the utensils and supplies used first with water be stored at the sink center, those that are used first with heat be kept at the range, and all others be stored at the mixing center. Space can be conserved and walking reduced by combining mixing center supplies and utensils with those used first at the sink and serving supplies and utensils with those used first at the range.^{9, 10, 11}

⁹ Mary Koll Heiner and Helen E. McCullough, *Kitchen Storage Space*, Cornell Univ. Ext. Bul. 703, 1947.

¹⁰ Mary Koll Heiner, "Functional Kitchen Storage in Terms of Body Economy," *Journal of Home Economics*, Vol. 39 (February, 1947), pp. 70-72.

¹¹ Mary Koll Heiner, "Functional Storage of Kitchen Utensils," *The Kitchen Reporter*, published by Kelvinator Kitchen, October, 1946.

List Indicating Allocation of Utensils to Centers of First Use

Sink center. Utensils used first with water. These include all top-of-range utensils except skillets and pan covers. The list would be:

1. Saucepans, double boilers, stock pot, soup or preserving kettle
2. Colander, strainers, sieves, funnel
3. Brushes for vegetables and utensils; small tools for cleaning, paring, slicing, or dicing fruits and vegetables; scissors, apple corer, potato parer, and paring knives
4. Measuring cups—three sizes, liquid
5. Dishwashing and clean-up utensils
6. Garbage and trash cans

Range center. Utensils used first with heat.

1. Skillets and griddle
2. Covers to all utensils
3. Small appliances for testing, stirring, turning, mashing, serving, and carving.
4. Knife sharpener and hardwood cutting board
5. Some duplicates, including measuring spoons, nested measuring cups, a slotted spoon, and a 2-quart saucepan for vegetables and possibly a can opener

Mixing center. All other utensils on the basic list.

1. Measuring spoons, cups and pitchers, mixing and storage bowls, mixing and sampling spoons and forks
2. Cork screw, can and bottle opener
3. Sifter, mixing and blending spoons and forks, spatulas
4. Rolling pin, food grinder, graters, beaters, and electric mixer
5. Cutters for doughs, sandwiches; kneading and cutting board
6. Pie, cake, pudding and meat loaf pans and cups, cooky sheets, casseroles, roast pans, trivets, cake coolers

Serving center. (Combined with range center or with china storage.)

1. Serving trays or cart on wheels
2. Electric pieces for coffee, toast, waffles

Planning Storage Spaces and Work Counters

Ease of handling in assembling utensils and supplies and putting them away is an important consideration in the choice of storage facilities—cabinets, shelves, and drawers—and in the location of storage space with reference to the working surfaces in the kitchen.

Arranging supplies and equipment within easy reach saves needless walking, reaching, and stretching. The normal and easy working area of a person helps determine the maximum heights and depths of storage shelves. (See Figure 14, page 179.)

Heiner and McCullough¹² found that a height of 72 inches can be reached without difficulty by the homemaker of average height—about 5 feet 4 inches. The measurement from the floor to the tips of the fingers is about 28 inches and the maximum working area covers a slightly oval area, 48 inches across and 44 inches up and down. Items that are stored within the limits of the maximum working area or the radius of shoulder to curved fingertip grasp can be reached easily without bending over, stooping, climbing, or excessive reaching. (See Figure 39.)

The working area of the lower forearm—the elbow circle—is the normal working area. This is the area used in many kitchen tasks done at the work counters. The storage of frequently used, heavy, or large-size packages, utensils, and china as near counter level as possible, or within comfortable elbow reach, reduces needless shoulder lifting and fatigue. (See Figure 39.)

Storage one row deep, adjustable shelves of different widths, racks on doors, sectioning of shelves and drawers, drop-out bins, pull-out boards and tables, and two-way storage cabinets between kitchen and dining areas are some of the devices recommended by Heiner and McCullough to help make supplies and utensils easily visible and quickly accessible. Items of identical size and shape such as cups, saucers, and plates can be comfortably stacked, but those of graded size (nest of mixing bowls) or those used singly should not be stacked.

Choosing a comfortable height for kitchen working surfaces is an individual problem, since women homemakers have different body measurements. A height that would be comfort-

¹² Mary Koll Heiner and Helen E. McCullough, "A New Look at the Kitchen," *Architectural Forum*, Vol. 84 (1946), pp. 155-158, 187-190.

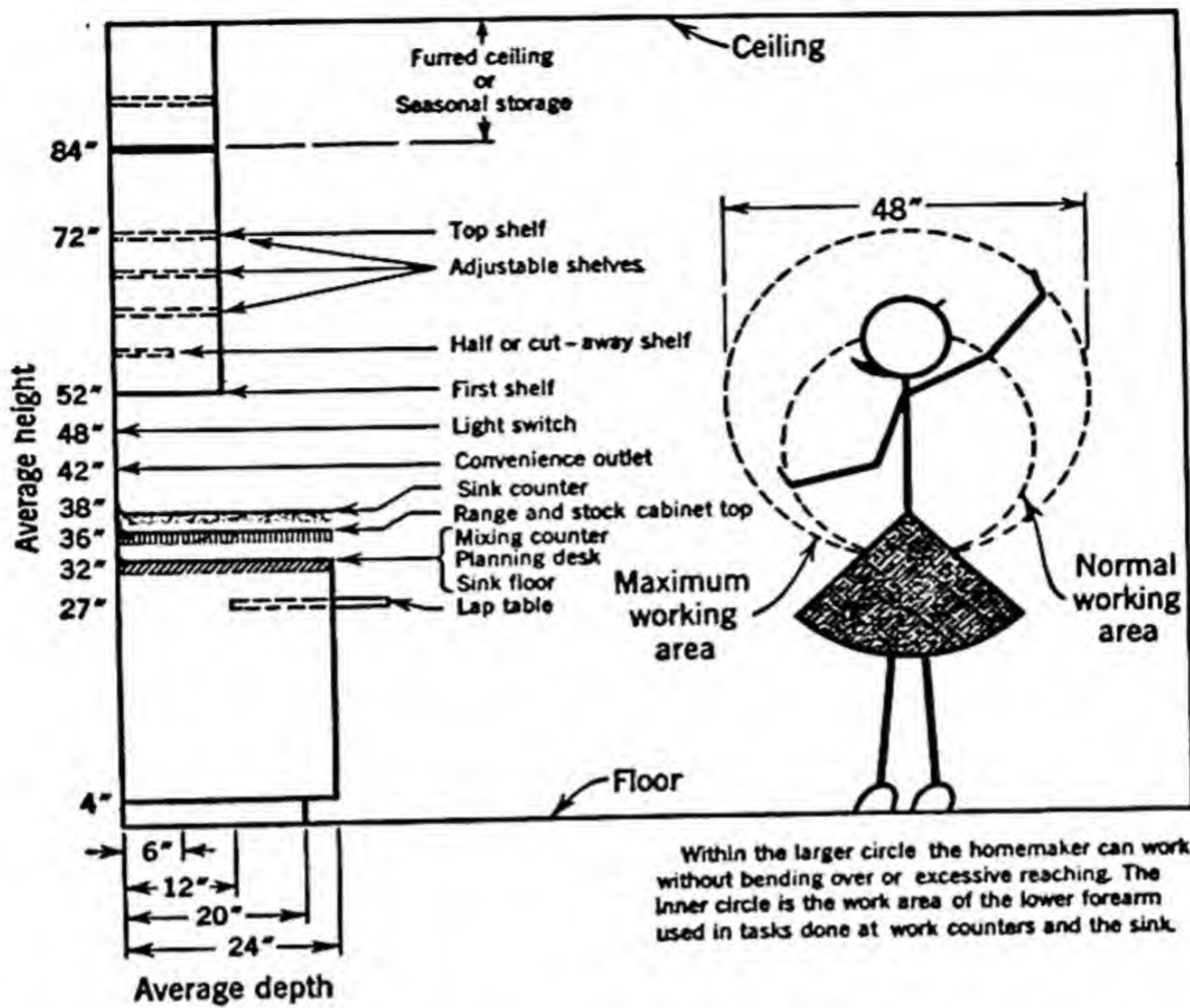


Figure 39. A guide to use in planning kitchen cabinets that fit both the worker and equipment. (Adapted from a chart prepared by Naomi Shank, in *Make Your Kitchen Modern*, Iowa State Agr. Ext. Serv. Bul. P92, 1948, p. 51.)

able for one person might be too low or too high for another. Knowles¹³ found that women of the same body height might have elbow heights varying as much as 3 inches. The same was true with waist and hip heights and the length of the arms. These variations are more important than the body height when considering a working height. Larger women have a problem quite different from that of slender women. Nearsightedness and bifocal glasses present other problems.

In choosing a comfortable height for a working surface, the main idea is to have the surface high enough so that one can reach as far as necessary without having to bend forward. However, a height that is desirable for one may not be comfortable for another. Work surfaces that are right for dishwashing and

¹³ Elaine E. Knowles, *Some Effects of the Height of Ironing Surface on the Worker*, N. Y. Agr. Exp. Sta. Bul. 833, 1946.

preparing vegetables and salads may be too high for beating and kneading. Oftentimes a bread board pulled out from below the working surface may provide the proper height for these tasks. A pull-out table or lap board permits the worker to sit comfortably at work. The work surface heights which Wilson found most comfortable for the average woman are given on page 174.

Storage Space in Kitchens

What to store, where to store, and how to store are points that call for careful planning in kitchen arrangements. The first two questions were answered on pages 388 and 389. Information on *how to store* and the storage space needed in both wall and base cabinets in kitchens for urban family use, in terms of conventional type cabinets, are given in a study by McCullough.¹⁴

Two sets of space standards were determined: *ample* in which supplies were stored without crowding and with little stacking of unlike items; and *minimum* planned for situations where economy would be necessary and where space would be limited. Various arrangements and combinations of supplies were tried until the best use of space was found. Space requirements were determined for both individual centers and for a combination of supplies at the mix and sink centers and at the range and serve centers.

A distance of 15 inches was left between base and wall cabinets and 72 inches was the height of the top shelf from the floor. In all cases, items stored back of the front row were arranged so that they could be easily reached.

Table 18 gives the ample and minimum space requirements for the liberal and limited lists of supplies requiring storage.

This information on cabinet space requirements has important bearings on kitchen planning standards. Some of the conclusions were as follows: ¹⁵

"The space requirements for liberal supplies in minimum space and for limited supplies in ample space were so nearly identical that one set of these standards may be used for a 'medium' kitchen.

¹⁴ Helen E. McCullough, "The Home Economist's Contribution to the Architect in Kitchen Planning," *The Kitchen Reporter*, published by Kelvinator Kitchen, April, 1951.

¹⁵ *Ibid.*, p. 3.

TABLE 18. TOTAL CABINET SPACE REQUIREMENTS *

Individual Centers	Combined Centers	Dinnerware for Specified Numbers				
		4	6	8	12	
AMPLE SPACE						
Liberal supplies						
Wall	7' 9"	5' 6"	2' 0"	3' 0"	4' 0"	6' 0"
Base	13' 6"	13' 6"				
Limited supplies						
Wall	6' 3"	4' 6"	2' 0"	3' 0"	4' 0"	6' 0"
Base	11' 0"	11' 0"				
MINIMUM SPACE						
Liberal supplies						
Wall	6' 3"	4' 6"	1' 9"	2' 6"	3' 6"	5' 0"
Base	11' 0"	11' 0"				
Limited supplies						
Wall	5' 3"	3' 6"	1' 9"	2' 6"	3' 6"	5' 0"
Base	8' 6"	8' 6"				

* Helen E. McCullough, "The Home Economist's Contribution to the Architect in Kitchen Planning," *The Kitchen Reporter*, published by Kelvinator Kitchen, April, 1951.

"The minimum amount of wall (exclusive of doors) required for base cabinets and appliances in a kitchen having 'liberal' storage facilities is 20 linear feet; for a 'medium' kitchen, 17 feet, 6 inches; for a 'limited' kitchen, 15 feet. To counteract the loss of wall space in corners, four feet must be added to these totals every time the assembly of cabinets, appliances, and counters turns a corner. Wall cabinets plus linear feet of windows will balance base cabinet plus equipment space requirements for appliances.

"Storage on shelves or in drawers requires practically the same space. Any loss in the inside width of drawers is compensated for by the fact that the entire depth of the drawers is functionally usable; this is not true of deep shelves. Drawers in base cabinets when properly designed in height and for construction are more functional than shelves because items stored in drawers are more accessible.

"Accessories such as step-up shelves, racks, and files do not appreciably change space requirements. They are necessary for

commercial cabinets if storage is to be functional, that is, if items are to be readily accessible and easy to reach and to grasp.

"The combinations of wall cabinets for the mix and sink centers and for the range and serve centers are advisable whenever kitchen arrangements make this possible. Space is saved in this method of storage due to the fact that the entire shelf capacities of some of the wall cabinets are not needed at individual centers. Because window space must be included in total above-counter wall space requirements, any reduction in wall cabinet space is an advantage."

Planning the Laundry

The convenient and compact working arrangements made possible by automatic washers and dryers have brought many changes in laundry needs in the home. Laundry areas can be smaller now because automatic washers take less floor space than laundry tubs or a nonautomatic washer, and the automatic dryer has eliminated the need for indoor drying space. As a result, the laundry area can be located in various places in the house.

Location of the Laundry Area

In some homes the laundry is placed in a room adjoining the kitchen, or it can be part of the utility or workroom. (See Figure 33.) Often laundry equipment is located in one end of the kitchen. (Sometimes a counter peninsula or a storage unit is used to divide the two areas. (See Figure 29.) It is also possible to place the laundry equipment in the bathroom or in a hall or a room adjacent to the bathroom. These locations save steps in collecting soiled articles and returning them to their nearby storage units. In mild climates laundry equipment is often placed in the garage, where it is closed off with folding doors. Many families who have basements prefer this location. When the laundry is in the basement a clothes chute is a real convenience and time-saver. The cost of a chute is very small in relation to its value in getting laundry where it is wanted, no matter whether it is done at home or sent out.

Work Space Required

In planning a laundry, the floor space needed both for washing and for ironing is important. In a study conducted by McCullough,¹⁶ measurements were made of the amount of space which homemakers of different heights and weights needed for all the operations involved in doing a laundry. These included filling the machine, removing clothes from a machine, walking, turning, stooping, using a cart, carrying a basket, rising from a chair, and passing another person. The study showed that there was little relationship between the size of the homemakers measured and the space used to do laundry. Work habits and movements of the body in most instances determined the amount of space required.

The minimum work space needed in front of a washer or dryer standing alone, or for a combination washer-dryer, was found to be at least 3 feet, 8 inches wide (side-to-side) by 3 feet, 6 inches deep (front-to-back). For an automatic washer and dryer placed together, the width of the work space needed was at least 5 feet, 6 inches. The front-to-back measurement remained the same—3 feet, 6 inches, exclusive of appliances.

The 15-inch ironing board required 6 inches of work space behind the board and 2 feet, 6 inches in front of it. The total work space depth for ironing was 4 feet, 3 inches, and the minimum width of the work space was 5 feet, 10 inches.

If a washer and dryer are placed opposite each other, the work space between them needs to be at least 4 feet. If the space in front of either appliance is used as a passageway, the work space needs to be at least 4 feet. This will permit other persons to pass in front of the equipment when laundering is being done.

Arrangement of Equipment

Laundry operations are greatly simplified when the equipment is placed so that the work flows along in one direction. The order of work usually followed is the sorting of clothes, removing of stains, washing, drying, and ironing. When automatic equipment is used, washing, rinsing, and drying are done the easy way. For the right-handed persons the normal sequence for

¹⁶ Helen E. McCullough, *Laundry Areas*, University of Illinois Small Homes Council, Circular C5.4, 1957.

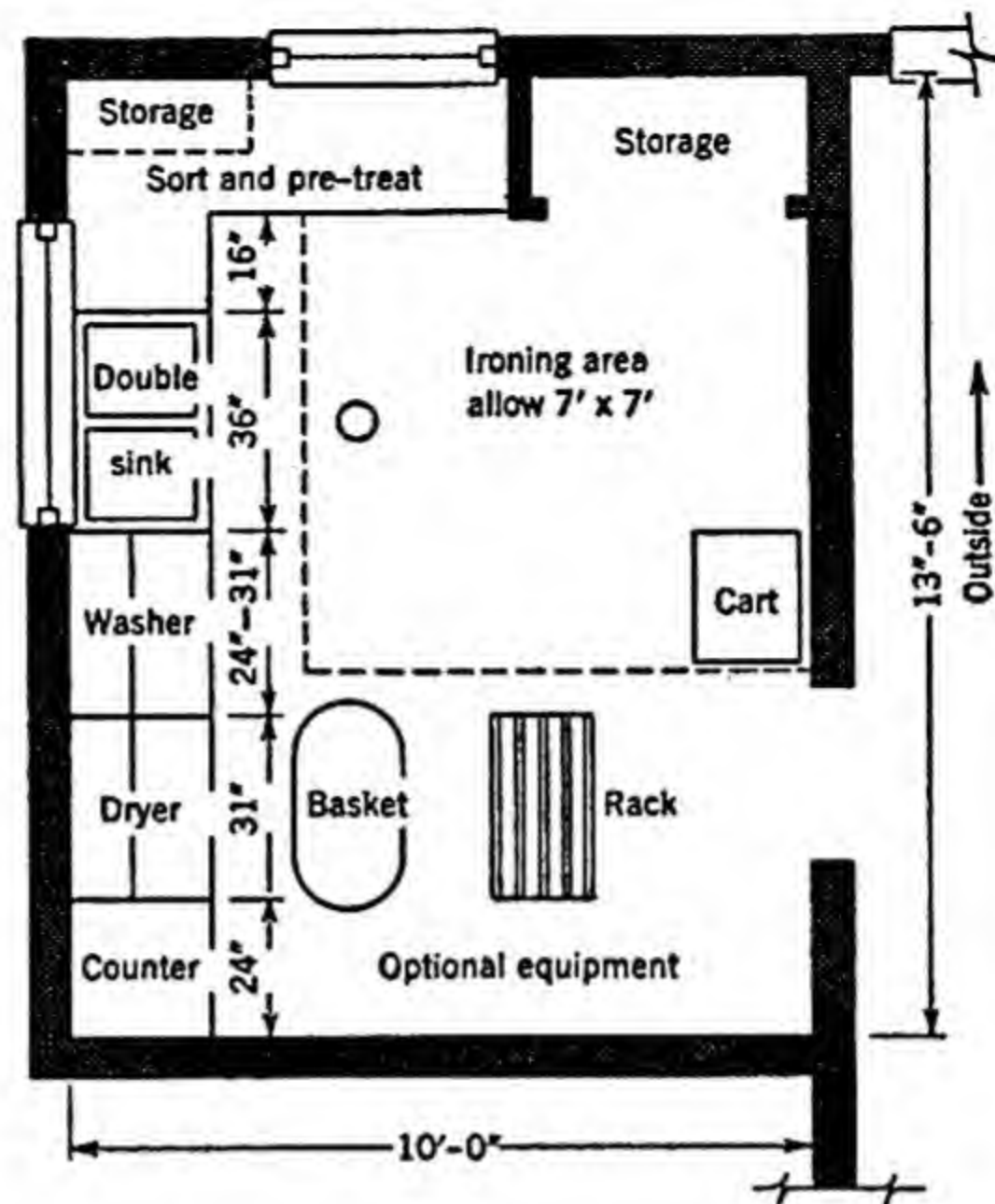


Figure 40. A floor plan for a laundry room with an automatic washer and dryer. (Arlean Pattison and Anna L. Wood, "Planning the Automatic Laundry," *The Kitchen Reporter*, published by Kelvinator Kitchen, October, 1953.)

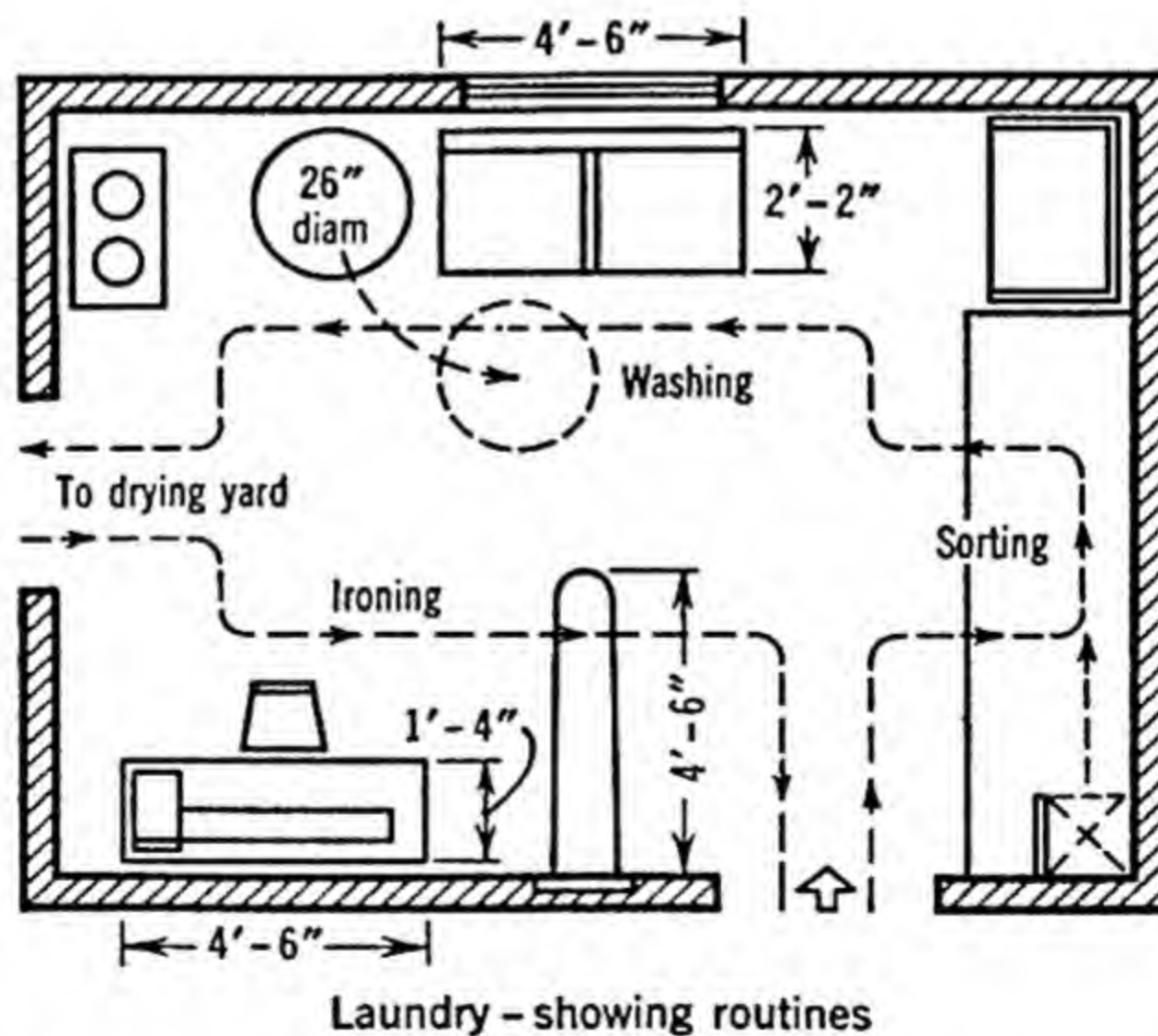


Figure 41. A floor plan for a laundry room with an electric washer and ironer. (Courtesy of Ernest Pickering, *Shelter for Living*, New York: John Wiley & Sons, Fifth Printing, 1947.)

laundrying is from right to left. The laundry plans in Figure 40 and 41 show two step-saving arrangements. Although the equipment is different, the order of work is similar in both plans.

Planning Adequate Household Storage

Satisfactory plans for any livable house provide for adequate storage space throughout the house. Efficiently planned storage contributes to orderliness and ease in living.

In making plans for storage space, the prospective homeowners should (1) list the articles for which they will need storage, and (2) decide how to store each item nearest the point of use. The following list suggests the different kinds of articles for which different rooms in the house and the garage or carport may provide suitable and possible storage.¹⁷

Living-Dining-Recreation Area (including study and family room)

Books	Musical instruments
Magazines	Sports and hobby equipment
Television	Sewing equipment
Radio	Dinnerware and table linen
Record player and records	Toys

Sleeping Area

Clothing (every bedroom)	Desk supplies (sometimes in living area)
Bedding	Business papers (sometimes in living area)
Luggage	Typewriter

Hall Area

Bedding	Coats and children's wraps
Bathroom supplies	Card tables and folding chairs

Work Area

Utensils	Table linen
Foods	Cleaning equipment
Dinnerware	Cleaning supplies

Garage or Carport

Gardening supplies and tools
Paints and painting equipment
Bicycles and play equipment

¹⁷ Helen E. McCullough, *Space Design for Household Storage*, Univ. of Illinois Agr. Exp. Sta. Bul. 557, 1952, pp. 14-15. (Adapted)

McCullough found that practically all types of articles requiring storage in the house fit into depths of 4, 8, 12, 16, 20, or 24 inches, with economical use of space.¹⁸

The depths for storage units are easier to determine than the widths, which necessarily depend on the different types of articles to be stored and the variations in the number of items. A few types of articles fit almost equally well in more than one depth, which makes for greater flexibility in storage. The minimum recommended depths and widths of storage units for specified articles and dimensions of basic units developed in this study are given in Table 19 on pages 400 and 401.

Storage Walls

Storage walls and prefabricated cupboards, closets, dressers, and desks, sized to fit one's particular possessions, are now being manufactured. These units concentrate all important storage in one easy-to-get-at place in the areas where the articles are used. They may serve as partitions with storage units on both sides, each serving many different purposes. For instance, in the living room, one side of the wall may include storage for books, magazines, games, game tables, records, built-in radio and record player, and desk. On the dining room side there may be cupboards for china, glass, silver, and linen. Bedroom storage walls may provide space for clothes which need to be hung, drawer space, trays, and shelves for the other articles of clothing, and a shoe rack. Living and dining areas are sometimes separated from the entryway by a storage wall. This arrangement provides space for coats on one side, and for books or china and linen on the other side. (See Figures 29 and 33.) A short half-partition may be used to separate living and dining areas, if desired. A wall of storage may be as high or low as needed, or units may be used as free-standing furniture.

Storage walls may be purchased in separate units which may be fitted together in many different ways. If desired, these

¹⁸ *Ibid.*, p. 11.

movable units may be separated and rearranged to fit other rooms or space.^{19, 20, 21, 22}

The Exterior Design of the House

In working out the floor plan of the interior of a house some thought must be given to the way the plan will affect the exterior design of the house. Both are definitely related and part of a harmonious whole. Fortunately, it is possible with careful thought and planning to have both an interior plan good in design and well suited to the family and a pleasing exterior. When the two are thought of as a unit and worked together, the arrangement of the interior plan will be reflected in the exterior design.

Studying the different possibilities in floor plans and exterior designs of different shapes—square, rectangular, L-shaped, T-shaped, or U-shaped—is one of the best ways to see the relationships between floor plans and exterior designs. Usually it will be seen that several different exteriors may be developed for each of the floor plans. By means of different-shaped roofs and exterior finishes, a different arrangement of doors and windows, or another type of entrance, the elevation of any plan can be greatly changed in appearance.

Houses of simple design, pleasing in proportions, with well-spaced windows, an interesting doorway, and a minimum number of different materials are usually the most satisfying over a period of time. Such houses are less expensive to build and require less upkeep than the more ornate or elaborate type of dwelling. The making of a small pasteboard model of the house being planned is one of the best ways to visualize the appearance of the completed house.

¹⁹ Sleeper and Sleeper, *op. cit.*, pp. 213, 217-219.

²⁰ *Household Storage Units*, University of Illinois Small Homes Council, Circular C5.1 (January, 1953), pp. 4-12.

²¹ *Storage Partitions*, University of Illinois Small Homes Council, Circular C5.11 (September, 1953), pp. 2-8.

²² Mary and Russel Wright, *Guide to Easier Living*, New York: Simon and Schuster, 1950, pp. 56-90.

TABLE 19. MINIMUM RECOMMENDED DEPTHS AND WIDTHS OF STORAGE UNITS FOR SPECIFIED ARTICLES, AND DIMENSIONS OF BASIC UNITS DEVELOPED IN THIS STUDY *

Item	Minimum Depth, Inches	Dimensions of Basic Units		
		Depth, Inches	Width, Inches	Height, Inches
Bathroom supplies	16	16	24	84
Bed, folding, and guest supplies				
30" bed	24	24	48	84
39" bed	24	24	56	84
48" bed	24	24	68	84
54" bed	24	24	72	84
Bedding	16	16	24	84
Books	9 or 10	10	24	84 ^a
Business papers and supplies				
Commercial file with drawers	16 (plus handles)	16	16	84 ^a
Box files	12	12	16	84 ^a
Card tables and folding chairs	1½ to 2½ per table, 2 to 4 per chair	24	36	38
Cleaning equipment and supplies	16 or 24 depending on width of unit	24 16	24 36	84 84
Cleaning supplies only	4	4	24 ^b	48 ^a
Clothing				
On hooks (chore or play clothes)	16	16	60	84
On hangers	24 or 28	24	48	84
Desk supplies				
Shelf storage	12 (14" drop shelf)	12	36 ^b	44
Drawer storage	16 (14" drop shelf)	16	36 ^b	44
Dinnerware				
Complete service	12	12	24 ^b	84
Glassware only	4	4	24 ^b	48 ^a
Foods				
Miscellaneous	8	12	36 ^b	84 ^a
Canned only	4½	8 ^b	24 ^b	84 ^a
Packaged only, broadside out	4	4	24 ^b	48 ^a

* Helen E. McCullough, *Space Design for Household Storage*, Univ. of Illinois Agr. Exp. Sta. Bul. 557, 1952, pp. 12-13.

^a Height can be varied.

^b In the basic storage units, the depth or width is not always the minimum, but rather the measurement that gives the most flexibility or the best proportion.

TABLE 19. MINIMUM RECOMMENDED DEPTHS AND WIDTHS OF STORAGE UNITS FOR SPECIFIED ARTICLES, AND DIMENSIONS OF BASIC UNITS DEVELOPED IN THIS STUDY (Cont.)

Item	Minimum Depth, Inches	Dimensions of Basic Units		
		Depth, Inches	Width, Inches	Height, Inches
Infants' equipment	24 ^c	24	84	84
Linens				
Bath	12	16 ^b	24	48 ^a
Bed	16	24 ^b	24	84
Table	16	20 ^b	24	84 ^a
Luggage	24 ^c	24	48 ^b	48
Magazines				
Shelves and tiers combined	12	12	24	84
Musical instruments	16	16	36	84
Radio with record-player and records	16	16	36 ^b	36 ^a
Sewing equipment and supplies				
Portable machine	24	24	48	84
Standard machine	24	24	60	84
Sports equipment	16	16	36	84
Toilet articles	4	Use section of dressing table as needed		
Tools, carpentry	4	4	24	56
Toys	12	12	48 ^b	48
Typewriter desk for either portable or upright machine	20	20	36	40
Utensils, kitchen				
On shelves	12	12	36 ^b	84
On hooks	6	6	24 ^b	84 ^a
Wood for fireplace	12	12	36	24

^a Height can be varied.

^b In the basic storage units, the depth or width is not always the minimum, but rather the measurement that gives the most flexibility or the best proportion.

^c Minimum inside dimension.

Ways of Controlling Building Costs

Through good planning of both the interior and exterior design of the house, the utilization of standard sizes of framing lumber and other items of stock millwork, the avoidance of waste of materials and labor, and the omission of all unnecessary items, building costs can be kept at a minimum. To the inexperienced

home builder, the advice and help of an architect or builder who has expert knowledge of building materials and construction methods and of the best ways to plan for the installation of plumbing, heating, lighting, and insulation will be most helpful. When such advice cannot be obtained, the use of ready-made plans and specifications will eliminate many mistakes and unnecessary building costs.

Obtaining Plans and Specifications

After a family has decided on the kind of house it would like to build, there are several ways of getting plans and specifications. An architect may be engaged to help draw up the plans, or a ready-made plan may be purchased.

Architect's Services

Because of his expert knowledge of building materials and construction, an architect frequently saves more than the cost of his fee by eliminating unnecessary costs in planning and building. He may also enable the home builder to secure a house of better design, arrangement, and construction, as well as one which may have a higher sale value in the future.

The fee for an architect who prepares the plans and specifications and supervises construction varies from 6 to 15 percent of the total value of the house. The fee is from 3½ to 8 percent when he does no supervising. The agreement between the architect and owner should cover his duties and dates of payment during the time of building.

Ready-Made Plans

Those who feel they cannot afford an architect or do not need his services may purchase "stock" house plans and specifications from national magazines or from dealers supplying building materials and have a contractor build the house. Many of these plans are prepared by architects and may be very satisfactory. However, they are not drawn to fit different types of lots, and it may be necessary to make costly changes in them.

Families who do not wish to take all the responsibility of

planning a house may find a prefabricated house a solution to their problem. The costs of a "prefab" should be carefully checked to be sure that all costs are understood and added to the price.

Specifications

The specifications which accompany the working drawings or house plans describe the quality of materials which are to be used in building the house and the kind of workmanship necessary to ensure good construction. Specifications are a part of the completed plans and enter into the contract between the owner and the contractor. They make it possible for all contractors to bid upon materials and workmanship of a given standard.

The specifications are arranged in the general sequence that the construction of the house will follow, and each item of information is listed under separate headings.

Carefully prepared specifications will protect the owner and prevent many misunderstandings throughout the work. They also protect the contractor, since no demand can be made upon him for something that has been omitted by the architect or the owner. If the owner and the architect decide to omit some item or make some substitution that will cost less, this will decrease the total cost of the building for the owner. On the other hand, if the owner wishes to add something not included in the specifications and the contract price, he must pay for it.

Selection of the Builder or Contractor

Letting out the plans to a number of builders or contractors for competitive bidding is the next step. When these bids are submitted and checked by the owner and architect, the contractor is selected and the contract awarded to him, subject to completion of financing the building costs. (See Chapter 15.)

Before the contract is let, the reputation and ability of the contractor should be carefully checked. Since a house usually represents the largest single expenditure the family makes, employing any but the best contractor is likely to be unwise. Information concerning a contractor can be obtained from the

architect, if one is employed, or from other home owners who have had the contractor build their homes.

The contractor is responsible for the construction of the house and for carrying out his part of all business arrangements agreed upon between him and the owner. The contractor furnishes the materials and carries out the work according to the plans and specifications.

Relation of Housing to Time and Energy Costs

Although the saving of money is important in the preparation of plans and specifications for a house, the possibilities of saving time and energy in daily care of the house should not be overlooked. The size of the house, the arrangement of the rooms, the general cleanliness of the environment, the design of and the material used in the walls, ceilings, floors, furniture, accessories, and on all working surfaces affect the amount of time and energy spent on daily care.

Homemakers who take time to plan a house with step-saving arrangements and adequate storage facilities, and who choose materials and finishes from the standpoint of care and upkeep as well as attractiveness and cost, will simplify their cleaning problems. Real satisfaction in home ownership is possible only when housekeeping standards can be reasonably attained without undue strain and fatigue.

Additional References

- Agan, Tessie, *The House: Its Plan and Use*, Philadelphia: J. B. Lippincott, Revised, 1956.
- Becker, Howard, and Reuben Hill, *Family, Marriage, and Parenthood*, Boston: D. C. Heath and Company, 1955, Chapter 17.
- Beltsville Energy-Saving Kitchen*, U. S. Dept. of Agr. Leaflet No. 418, 1957, and Design No. 2, L-463.
- Budolfson, Marie, "How the Rural Kitchen Differs from the Urban Kitchen," *The Kitchen Reporter*, published by Kelvinator Kitchen, 1946.
- Cherner, Norman, *Fabricating Houses from Component Parts*, New York: Reinhold Publishing Corporation, 1957.
- Cushman, E. M., *Centers for Work and Leisure*, Cornell Agr. Exp. Sta. Bul. 811, 1951.

- Ehrenkranz, Florence and Lydia Inman, *Equipment in the Home*, New York: Harper and Brothers, 1958, Chapters 3, 7, and 8.
- Farmhouse Planning Guides*, Northwestern Regional Research Publication, Ithaca, New York: Cornell Univ. Agr. Exp. Sta., 1959.
- Hawkins, J., "Trends in Today's Homes," *What's New in Home Economics* (September, 1959), 116-117.
- Hinson, Thelma, "The Kitchen-Family Room: Its Use and Design," *Journal of Home Economics*, Vol. 52 (February, 1960), 107-108.
- Livingston, M., "Parents' Magazine Expandable Homes for Families with Children," *Parents' Magazine* 34, No. 9 (September, 1959), 61-63.
- McCullough, Helen E., "A Pilot Study of Space Requirements for Household Activities," *Journal of Home Economics*, Vol. 37 (January, 1955).
- McCullough, Helen E., *Storage Walls for Kitchen-Dining Areas*, Univ. of Ill. College of Agriculture, Circular 807, 1959.
- McCullough, Helen E. and Mary B. Farnham, *Wheelchair Kitchen Research*, Univ. of Ill. Agr. Expt. Sta. Bul., 1960.
- Ridder, Clara Ann, *Basic Distances in 100 Farm Homes*, Cornell University Agr. Exp. Sta. Bul. 879, 1952.
- The Cornell Kitchen*, edited by Glen H. Beyer, Cornell University, 1953.
- The Second Treasury of Contemporary Houses*, by Editors of the *Architectural Record*, New York: F. W. Dodge Corporation, 1959.
- Thorpe, Alice C., and Irma H. Gross, *How Homes are Used on Farms and in Small Cities*, Mich. Agr. Exp. Sta. Tech. Bul. 254, 1955.
- University of Illinois Small Homes Council Circulars
- | | |
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| A1.3 Financing the Home | F6.0 Insulation |
| A2.0 Business Dealings with Architect and Contractor | F6.2 Moisture Condensation |
| B3.0 Land Design | F7.0 Chimneys and Fireplaces |
| C5.1 Household Storage Units | F11.0 Window Planning Principles |
| C5.11 Storage Partitions | F11.1 Selecting Windows |
| C5.31 Cabinet Space for the Kitchen | F11.2 Insulating-Windows and Screens |
| C5.32 Kitchen Planning Standards | F15.0 Hardware |
| C5.33 Separate Ovens | G3.1 Heating the Home |
| C5.4 Laundry Areas | G3.2 Controls for Central-Heating Systems |
| C5.9 Garages and Carports | G3.5 Fuels and Burners |
| D7.0 Selecting Lumber | G5.0 Plumbing |
| D9.0 Plastics as Building Materials | G5.5 Septic-Tank Systems |
| F2.0 Basements | G6.0 Summer Comfort |
| F3.0 Wood Framing | H1.0 Interior Design |
| F4.6 Flooring Materials | F9.1 Counter Surfaces |
- Wright, Mary and Russel, *Guide to Easier Living*, New York: Simon and Schuster, 1950.

17

Selecting Furnishings and Equipment

THE HOUSE WHICH MEETS the family needs for comfort, relaxation, and work must have furnishings and equipment suited to each activity area. In the living and recreation areas, the furnishings should be designed for comfort, and for the social and esthetic enjoyment of the family. In the sleeping area, where individual tastes play a larger role, the furnishings should provide convenience and rest. The work area, which involves both individual and group interests, should have adequate equipment for carrying on the daily activities of the household. Since the furnishings of the house must be lived with constantly, they should be attractive enough to give pleasure, as well as being durable and useful. Checking the family's needs and interests, getting information on which to make decisions, then intelligently deciding on the amount to be spent on the items to be bought are the major management problems in furnishing and equipping a home.

The solution of many furnishing problems depends on the resources available and the skill with which they are used. When money is scarce, other resources such as the abilities, knowledge, time, and energy of members of the family may be used in securing some of the needed items. The different ways in which three persons, a homemaker, a professional woman, and a young girl, solved the problem of getting new draperies for their rooms

are good examples of alternate uses of different resources. (See pages 44–46.) Many other illustrations of how furnishing and equipment problems are met by families working together and by students in college are given by Cushman in her book on home management.¹

Planning for Furnishings

The furnishings in a home are the expression of individual and family tastes and likes. Some rooms may be planned to express the combined interests and activities of the family group, while plans for other rooms may be developed around a fireplace, or a view, or some special interest of the family. How much real living a family can enjoy in a house depends on how well the homemakers coordinate family activities and furniture and equipment.

Alternative Choices

Families may consider a number of alternatives in making plans for furnishing their homes. Some families may decide to buy only a few good pieces for each room—just the essentials—and then add others later. Other families may prefer to buy a larger number of less expensive pieces. Some families may get greater satisfaction out of furnishing their living room the way they would like it and using inexpensive things in the other rooms until they can replace them with better ones. When funds are limited, families may choose between buying a few pieces of cheap, new furniture or buying used furniture of better quality and design that can be refinished or slipcovered at little expense. For families who enjoy “do-it-yourself” projects, money may be saved by buying unfinished pieces of furniture and certain kinds of furniture that can be assembled and finished at home.

Problems of Selection

Before making plans for buying furniture, a family must decide whether it wishes to buy pieces that will last for years to

¹ Ella M. Cushman, *Management in Homes*, New York: The Macmillan Company, 1945.

come, or for only a short time. If a family knows the type of furniture it wants, it may plan to buy more expensive pieces at the start and add to these as the money becomes available. For families who have not made this decision, a large number of items and early purchases may be more important.

Selection of furniture for the different rooms in a house should be judged on the basis of suitability or fitness for use, quality of workmanship, construction, and finish. These factors affect the purchase price of furniture. They determine the real worth of the item and the satisfaction the family will get from it.

Besides being useful, furniture should be attractive. Any object intended for use depends for its beauty upon good structural design—form, size, color, and texture. Simple lines and pleasing proportions are desirable features of all furniture and equipment in the home. Size is important both from the standpoint of use and appearance. Each piece should be related in size and character to the others and to the room itself and should satisfy the requirements of utility and comfort. Color and interesting textures enhance the beauty of objects. They also add interest to a room when arranged in the right combination.

A study made by Van Syckle² of the consumer use and purchase of furniture in Flint, Michigan, shows that the majority of families plan and make decisions in advance when buying furniture and equipment. She found that the husband and wife participated in the planning of 85 percent of the purchases of furniture, and they made about 60 percent of the purchases together. The values sought by these families in buying different groups of furniture are shown in Figure 42. Appearance or some specific feature such as finish or style was most important in selecting bedroom furniture. In sofas and easy chairs, comfort and durability were stressed, as well as appearance of the piece or set by itself and in relation to the room and the other furnishings. Suitability to the space available was important in other living and dining room furniture.

² Calla Van Syckle, *Consumer Use and Purchase of Furniture in Flint, Michigan*, 1951, Mich. Agr. Exp. Sta. Tech. Bul. 233, 1952, pp. 4, 29-31.

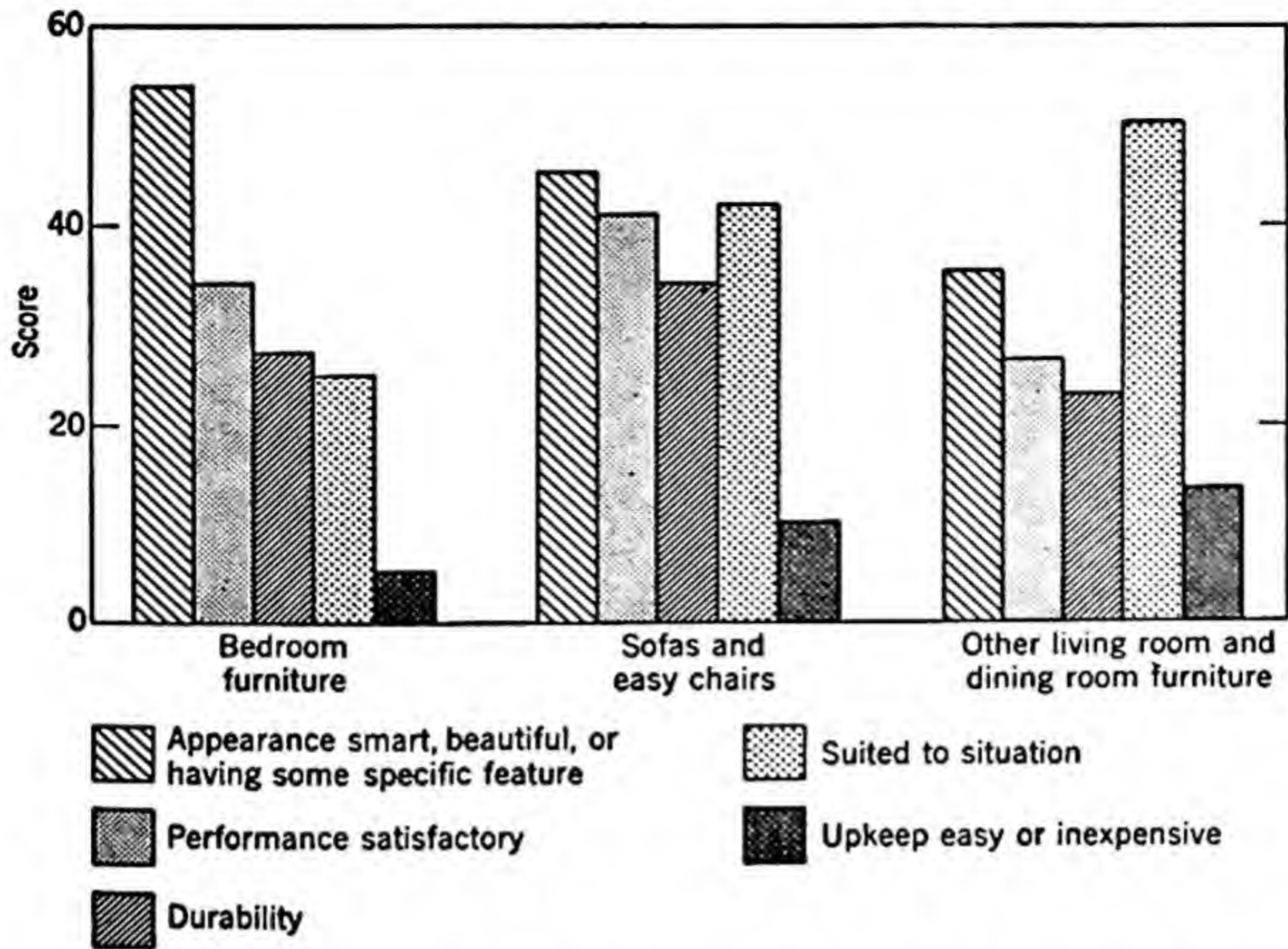


Figure 42. Relative importance of values wanted in specified groups of furniture. (Calla Van Syckle, *Consumer Use and Purchase of Furniture in Flint, Michigan, 1951*. Mich. Agr. Exp. Sta. Tech. Bul. 233, 1952, p. 30.)

Van Syckle ³ also carried on an investigation in Lansing, Michigan, to learn consumer practices in buying "large-expenditure" items. This survey showed that planning and purchasing were done largely by husband and wife together. These families considered durability, satisfactory performance, and attractive appearance the most important characteristics of furniture. Satisfactory performance was rated of first importance in the selection of equipment. Suitability and durability also ranked high. (See Figure 43.)

³ Calla Van Syckle, *Consumer Practices in Buying "Large-Expenditure" Items of Clothing, Furniture, and Equipment*, Mich. Agr. Exp. Sta. Tech. Bul. 224, 1951, pp. 18, 19.

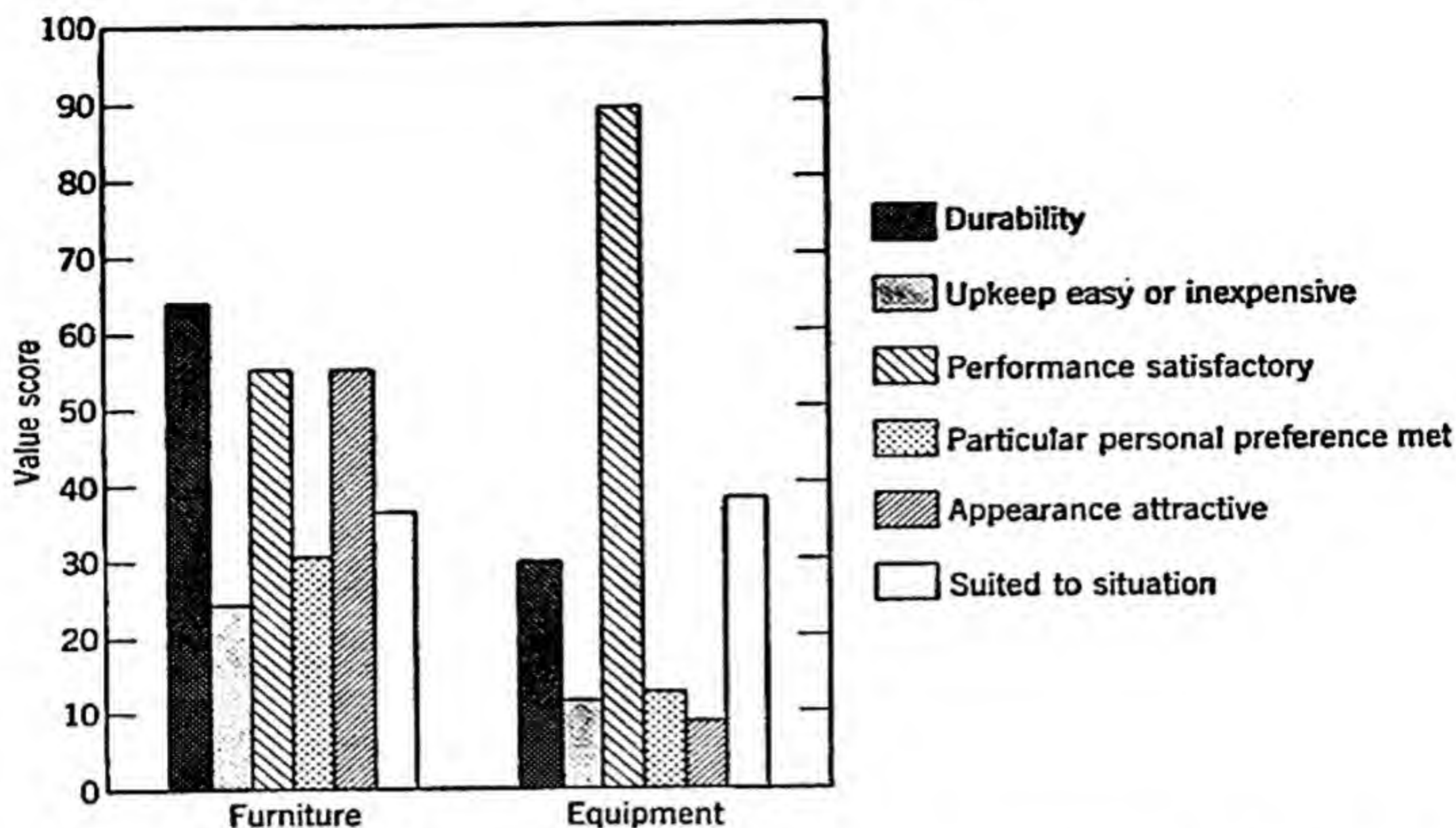


Figure 43. Relative importance of values wanted in large-expenditure items of furniture and equipment. (Calla Van Syckle, *Consumer Practices in Buying "Large-Expenditure" Items of Clothing, Furniture, and Equipment*, Mich. Agr. Exp. Sta. Tech. Bul. 224, 1951, p. 22.)

Costs of Furnishings and Equipment

The initial cost of furnishings and equipment for a house and the amount that should be planned for annual costs are of concern to all families who are furnishing a house or who are making plans for buying new pieces of furniture and equipment.

House furnishings and equipment budgets for families of two income levels were reported for 1957 for the San Francisco Bay Area by the Heller Committee for Research and Social Economics. The estimated *initial cost of furnishings and equipment* for the salaried worker with an income of \$8,885 was \$4,961, and for the wage earner with an income of \$6,204, it was \$3,106. The annual costs amounted to \$324 for the salaried worker and \$217 for the wage earner. The annual cost of furnishings and equipment was about 3.6 percent of the income of both groups.⁴

⁴ *Quantity and Cost Budgets for Two Income Levels*, The Heller Committee for Research in Social Economics, University of California, Berkeley. Prices for the San Francisco Bay Area, September, 1957 (including sales tax), pp. 16, 32, 57, 69.

Recent surveys indicate that persons recently married bought durable goods with greater frequency and in larger volume than other consumers. Demand for household durable goods remains high for a relatively long period after marriage, although there are changes in the type of goods. Persons married more than 20 years purchased less frequently. The annual outlay ranged from \$230 for purchasers in the lowest income bracket to \$600 in the highest bracket.⁵

A survey of the electric appliances in today's homes shows that more than 45 million homes now use a refrigerator, an increase of 10 million in the short span since 1951. More than 41 million homes enjoy the convenience of an electric washer, and housewives in some 32 million homes have a vacuum cleaner. From virtually none in 1946, there are now more than 38 million homes with televisions, 8.6 million with freezers, and 5.6 million with clothes dryers.⁶

Plans for Buying Furniture

There are three methods of buying furniture. The family may save and pay cash for what it buys. This is the best way, of course, but not many families can save large enough sums to buy all the furniture needed at one time. Some families work out a plan for the articles most wanted, and then buy a few pieces from time to time as funds become available. Many families pay for furniture on the installment plan. This enables a family to have its furniture immediately and take care of the payments out of future income. This method of financing costs more, but it is a convenient way to buy.

For families who are furnishing a house throughout and also for those who are buying only a few articles at a time, a plan for the distribution of the money available is helpful. Planned spending results in getting more for the family's money and in buying the essentials first. To make such a plan the family

⁵ "Survey of Consumer Housing and Durable Goods," *Federal Reserve Bulletin*, Vol. 43 (June, 1957), pp. 636, 645.

⁶ *Fire Insurance Facts and Trends*, National Board of Fire Underwriters, New York City, July, 1957.

first decides on the amount it can spend. It considers its total needs, lists the items wanted, and checks the market prices. With this information, a record for each room, similar to the one below, can be made. This long-time furnishing plan lists the items needed, items owned, items to be bought or refurbished, the estimated cost of the items, the date to be purchased. This plan gives an estimate of the cost of the furnishings for each room, as well as the furnishings and equipment for the entire house. It can be used as a guide in making all future purchases.

HOME FURNISHINGS PLAN *

Living Room

Items Needed	Items Owned	Items to Be Bought or Refurbished	Estimated Cost	Date to Be Purchased

* Adapted from chart in *Money Management—Your Home Furnishing Dollar*, Household Finance Corporation, Chicago, 1958.

Planning for Equipment

The equipment in a house consists of articles and appliances that are used to perform various tasks. They are valued both for the work which they can do as well as for the many ways in which they reduce the time and effort required for many of the routine tasks.

A buying plan for both small and large pieces of equipment is desirable, since they represent a large share of the family's investment in its home. Although many pieces of equipment are thought of as durable goods, they do wear out and replace-

ments are constantly being made which must be planned for in the family budget.

Plans for Kitchen Utensils

Individual desires and needs are determining factors as to size and number of kitchen cooking utensils. Several studies on small kitchen equipment have been made.^{7,8} Ninety farm families in three states reported in one study. A record of the utensils actually used in the preparation of typical menus resulted in a list of 50 articles, called the "minimum set," with 22 additional articles given to make up a "more desirable set." The lists which follow may be suggestive for checking the adequacy of a family's plan or of a supply already on hand.

A MINIMUM AND A MORE DESIRABLE SET OF KITCHEN UTENSILS •

Minimum Set

(Utensils used one or more times per week by 50 to 100 percent of cooperating homemakers)

Top-of-range Utensils

- 1 coffeemaker, to suit family
- 1 double boiler, 1 ½-quart
- 1 frying pan, 10- to 12-inch diameter
- 1 frying pan, 8-inch diameter
- 1 kettle with lid, 8-quart
- 1 saucepan, 1-quart
- 1 saucepan, 3-quart
- 1 saucepan, 4-quart

Mixing Bowls and Measures

- 1 measuring cup (from graduated set)
- 1 measure, 1-cup
- 1 measure, 1-pint
- 1 measure, 1-quart
- 1 mixing bowl, 1-pint

More Desirable Set

(Utensils used one or more times per week by 25 to 100 percent of cooperating homemakers)

Minimum set plus the following items:

Top-of-range Utensils

- 1 griddle
- 1 saucepan, 3-cup to 3-quart capacity as needed

Mixing Bowls and Measures

- 1 measuring cup, ¼-cup capacity
- 1 measuring cup, ½-cup capacity

⁷ Maud Wilson, "Standards for Kitchen Utensils," *Journal of Home Economics*, Vol. 35, (October, 1943), pp. 490-492.

⁸ Mary Koll Heiner and Helen E. McCullough, *Kitchen Cupboards that Simplify Storage*, Cornell Ext. Bul. 703, New York State College, 1947.

**A MINIMUM AND A MORE DESIRABLE SET OF KITCHEN
UTENSILS (Cont.)**

Minimum Set

Mixing Bowls and Measures (Cont.)

- 1 mixing bowl, 1-quart
- 1 mixing bowl, 2-quart
- 1 mixing bowl, 4-quart

Baking Utensils

- 1 baking sheet
- 1 casserole with lid, 2-quart
- 1 cooling rack, 10 x 10 inches
- 6 custard cups
- 1 pan, round, 12-inch
- 1 pudding pan, 9-inch diameter

Small Equipment

- 1 can and bottle opener
- 1 can opener
- 1 colander
- 1 case knife
- 1 cutting board
- 1 egg beater, rotary, medium size
- 1 fork, 2 tines, long handle
- 1 knife, bread or slicing, 8-inch blade
- 1 knife sharpener
- 1 ladle, $\frac{3}{4}$ -cup
- 1 mixing spoon, metal, nonperforated
- 1 mixing spoon, metal, perforated
- 1 orange or fruit squeezer
- 1 paring knife
- 1 potato or food masher
- 1 rolling pin, 12-inch
- 1 spatula, 7-inch blade
- 1 spoon, wooden, 11 inches long
- 1 strainer to fit top of cup
- 1 strainer, wire, 7-inch diameter
- 1 teapot

More Desirable Set

Baking Utensils

- 1 baking pan, 10 x 14 inches
- 1 baking sheet
- 1 bread pan, $9\frac{1}{2}$ x $5\frac{1}{2}$ inches
- 2 cake pans, round, 9-inch diameter
- 1 cake pan, square loaf, 9 x 9 x 2 inches
- 1 cooling rack, 10 x 10 inches
- 1 muffin pan, 8- to 12-cup
- 2 pie pans
- 1 roaster

Small Equipment

- 1 flour sifter
- 1 food chopper
- 1 food grinder
- 1 food mill or press
- 1 grater
- 1 set of measuring spoons
- 1 spoon, wooden, 15 inches long

A MINIMUM AND A MORE DESIRABLE SET OF KITCHEN UTENSILS (Cont.)

Minimum Set

Utensils Used at Sink

- 1 dish drainer
- 1 dishpan
- 1 pan to fit dish drainer rack or two dishpans
- 1 sink strainer
- 1 vegetable brush
- 1 pancake turner 14 inches long

* Avis Woolrich, Arnold Baragar, Blanche Kuschke, Jean Warren, Esther F. Phipard, and Lillian J. Fincher, "Cooking Utensils Based on Meal Patterns," *Journal of Home Economics*, Vol. 40 (June, 1948), pp. 307-308.

Some families may prefer to get along temporarily with fewer pieces in order to purchase better equipment. Another list of desirable kitchen utensils for the average urban family of four members is given below. This not only gives the 105 utensils needed, but also where they are to be stored.

DISTRIBUTION OF 105 UTENSILS STORED AT SINK, RANGE, SERVING, AND MIXING CENTERS IN TERMS OF FIRST USE *

Total items to be stored at:

Sink Area	35	Sink Area (Cont.)	
Top-of-range cooking	10	Food cleaning and straining	6
Regular use		1 brush, stiff	
1 stock pot, 6-quart		1 brush, soft	
1 stew kettle, 4-4½-quart		1 funnel	
1 saucepan, 3-4-quart		1 colander	
1 saucepan, 2-2½-quart		1 strainer, large	
1 saucepan, 1-quart		1 strainer, small	
1 double boiler, † 2-quart			
1 teapot, 6-cup		Paring, cutting, juicing	10
1 coffee pot, 6-cup		1 scissors	
Occasional use		2 paring knives	
1 stew kettle, 2-3-gallon		1 French-type slicing knife	
		1 hardwood cutting board	
Measuring equipment	3	1 steel or carborundum	
1 glass measure, 1-quart		1 apple corer	
1 glass measure, 1-pint		1 floating-blade vegetable	
1 glass measure, 1-cup		knife	

DISTRIBUTION OF 105 UTENSILS STORED AT SINK, RANGE, SERVING, AND MIXING CENTERS IN TERMS OF FIRST USE (Cont.)

Sink Area (Cont.)

- 1 can and bottle opener
- 1 fruit reamer or extractor

Clean-up 6

- 1 plate scraper
- 1 sink strainer
- 1 dish drainer
- 1 garbage unit
- 1 trash basket
- 1 dishpan

Range Area

Top-of-range cooking 10

Regular use

- 6 lids for saucepans and kettles
- 1 top section of double skillet, 10-inch
- 1 bottom section of double skillet, 10-inch
- 1 small size skillet, 8-inch

Occasional use

- 1 griddle, 10- or 12-inch

Measuring, mashing, testing, turning, carving 15

- 1 set measuring spoons
- 2 tablespoons
- 2 teaspoons
- 2 forks, 1 short, 1 long
- 2 large-bowl spoons, 1 slotted or 1 wooden
- 1 ladle
- 1 turner with perforations or 1 large spatula
- 1 potato masher
- 1 lifter for hot pans or vegetables
- 1 hardwood meat cutting board
- 1 meat-slicing knife

Mixing Area

Measuring, mixing, sampling 15

- 1 set measuring spoons

Mixing Area (Cont.)

- 1 set 4 Mary Ann cups
- 1 glass cup
- 1 mixing bowl, 4-4½-quart
- 1 mixing bowl, 2-2½-quart
- 1 mixing bowl, 1-1½-quart
- 1 mixing bowl, 1-pint
- 1 sifter
- 1 slotted spoon
- 1 teaspoon
- 1 tablespoon
- 1 pastry blender
- 1 spatula, large
- 1 rotary beater
- 1 flat beater

Grinding, grating, rolling, cutting 7

- 1 grinder
- 1 set graters
- 1 rolling pin
- 1 bread board, large
- 1 knife, large
- 2 cutters for biscuits, cookies, etc.

Baking, roasting 18

- 1 angel cake pan
- 2 layer cake pans
- 1 square cake pan
- 3 pie pans
- 2 muffin pans
- 1 long loaf pan
- 1 squat loaf pan
- 1 pan with trivet
- 1 casserole, 2-quart
- 1 casserole, 1½-quart
- 1 set of 8 custard cups
- 2 cooky sheets
- 1 cake cooler

Serving Area 5

Regular use 4

- 4 trays

Occasional use 1

- Electric coffeemaker

* Mary Koll Heiner, "Functional Storage of Kitchen Utensils," *The Kitchen Reporter*, published by Kelvinator Kitchen, October, 1946.

† From a storage and use standpoint, considered as 2 utensils.

Planning Dinnerware Selection

Two sets of dinnerware are included in a list on page 418. An every day set of 8 may be all that the family needs to start with. A set of 12 with 6 additional cups, saucers, and dessert plates allows for more extensive entertaining and can be purchased if needed. When sets of china are selected from "open stock," individual pieces may be bought later.

Dinnerware is made in a great variety of qualities and designs. China and porcelain dishes are the most durable and usually the most expensive. They are nonporous, vitrified, and semi-transparent. Semi-porcelain ware is more porous and comes in the medium price range. Dishes made of earthenware are porous and break more easily, but usually cost less. The better grades of plastic dinnerware are very durable and comparatively inexpensive.

Plans for Kitchen Equipment

The large pieces of equipment that must be planned for in any kitchen are a range and refrigerator. A garbage disposal, an electric dishwasher, and food freezer are valuable time- and energy-savers in the kitchen and are considered essential equipment by many families.

Before making a decision to buy any large and expensive piece of electric equipment, a family needs to check on the estimated lifetime of the appliance, the installation cost, maintenance cost, and the operation costs, as well as the satisfactions the appliance will give the family. Other important considerations, such as satisfactory performance, suitability, and durability were discussed on pages 409 and 410.

Plans for Laundry Equipment

Families have the choice between using a commercial laundry, a self-service laundry, or buying and using their own laundry equipment. Many families are investing in automatic washers and dryers and in ironers. Johnston⁹ found that the families

⁹ Betty Jane Johnston, "Home Laundering," *Journal of Home Economics*, Vol. 50 (January, 1958), pp. 36, 37.

BASIC DINNERWARE FOR AN URBAN FAMILY OF FOUR *

Daily Ware

China

Individual Pieces

- 8 dinner plates
- 8 breakfast, salad or dessert plates
- 8 bread-and-butter or pie plates
- 8 soup or cereal bowls
- 8 fruit or sauce dishes
- 8 cups
- 8 saucers

Service Pieces

- 2 open vegetable bowls
- 2 platters, 1 medium, 1 small
- 1 sugar bowl
- 1 cream pitcher
- 1 chop or cake plate

Glassware

Individual Pieces, Tumblers

- 8 iced tea, 10 ounce
- 8 milk or water, 8 ounce
- 8 fruit juice, 4 ounce

Service Pieces

- 1 milk pitcher, 1 quart
- 1 water pitcher, 2 quart
- 2 small bowls, condiment or jelly
- 1 salt and pepper set

Occasional Ware

China

Individual Pieces

- 12 dinner plates
- 12 breakfast or tea plates
- 12 salad plates
- 12 bread-and-butter plates
- 12 soup or cereal bowls
- 18 dessert plates
- 18 coffee cups
- 18 saucers
- 12 cream-soup cups
- 12 cream-soup saucers

Service Pieces

- 3 cream pitchers
- 3 sugar bowls
- 2 open vegetable bowls
- 1 covered vegetable bowl
- 2 platters, 1 medium, 1 large
- 1 chop or canape plate
- 1 gravy boat

Glassware

Individual Pieces, Stemware

- 12 goblets, 8 ounce
- 12 chilled beverage, 10 ounce
- 12 sherbet or cocktail, 4 ounce
- 12 juices, 4 ounce

Service Pieces

- 2 salt-and-pepper sets
- 2 small bowls for condiments
- 2 small bowls for jellies or sauces
- 1 oblong piece for condiments
- 1 water pitcher, 2 quart

* Helen E. McCullough, "A Kitchen Inventory," *The Kitchen Reporter* published by Kelvinator Kitchen, 1946.

who use automatic washers were more likely to have water-softening units and clothes dryers in their homes than were those who had nonautomatic washers. These are all big investments and such equipment is often bought on the installment plan. A clothesbasket, ironing board, and an electric iron are other pieces of equipment that are needed in the laundry.

Plans for Cleaning Equipment

Cleaning equipment is usually one of the first purchases made when a family starts housekeeping. The essential pieces are:

1 broom	1 mop
1 dustpan	1 scrub pail
1 long-handled dust mop	Lintless dust cloths
1 long-handled wall brush	Cellulose sponges for washing walls, windows, etc.
1 carpet sweeper	Vacuum cleaner
1 wastebasket	

Plans for Linens

Many young homemakers have a supply of linens when they start housekeeping, but for those who do not, the accompanying list gives the essential articles which should be included in the plans for buying furnishings. Since some of these articles will wear out in a year or so, plans should be made for replenishing every year.

2 bed pillows, medium quality	6 terry face towels
6 pillow cases, standard muslin	2 bath mats
6 double-bed sheets	6 wash cloths
2 blankets	1 package of paper guest towels
2 summer cotton blankets	6 dish towels
6 terry bath towels	3 dish cloths

Getting Information to Make Intelligent Choices

The great variation in qualities, makes, and prices complicates selecting and buying furnishings and equipment that will meet the family's requirements. It takes time to get reliable information about different types of furniture and equipment and to

evaluate the various features that contribute to the cost of the articles.

General Sources of Information

Careful study of the informative labels on merchandise will help a buyer identify the quality and performance of an item. Comparative shopping will give wider bases for decisions regarding quality and price. Demonstration of performance of equipment or wearing qualities of materials aids a buyer. Descriptions in advertisements in papers and magazines and in mail-order house catalogues give specific and helpful information. The various publications of the Bureau of Human Nutrition and Home Economics of the United States Department of Agriculture, the state agricultural experiment stations and extension services, reports of research in the *Journal of Home Economics*, and books and articles in magazines are other reliable sources of information on buying. The monthly reports of testing organizations such as the Consumers Union and Consumers Research give helpful ratings of consumer goods.

Van Syckle¹⁰ found in her study that the main sources of information used before purchasing "large-expenditure" items of furniture and equipment were shopping around and "looking" at items, talking with friends and relatives, consulting with salesmen, reading about the item, or hearing or seeing it advertised. Some investigation was made for over half of the purchases. For the rest, the price was determined by what the purchaser had to spend or could afford. Labels with statements about materials used and performance to be expected and how to care for and how to use the item were considered most useful.

Information on Furniture

Careful observation and scrutiny of furniture and equipment in stores and in other people's homes will supply much valuable information. Chairs can be tried for size and comfort by sitting tests in the show rooms. Further knowledge can be garnered

¹⁰ Calla Van Syckle, *Consumer Practices in Buying "Large-Expenditure" Items of Clothing, Furniture, and Equipment*, Mich. Agr. Exp. Sta. Tech. Bul. 224, 1951, pp. 23-28.

by questioning salespersons and others who have bought and used various items. This fact-gathering will reveal that there are many new ideas taking shape in the furnishing field.

Synthetic resin glues as well as electronic bonding which produces veneers that will not come apart after a few years' use, and an expanding dowel which makes a permanent joint are some of the new developments which will result in stronger and longer-lasting furniture. Harder, clearer, and more lasting finishes for surfaces as well as new methods of applying these materials have been worked out by chemical companies.

To provide greater seating comfort, lounge chairs are now being made with three sets of size specifications—for the short, the tall, and the average figure.

Springs for upholstered furniture with crimped or arc-wire supports that save time and cost because they are prefabricated are taking the place of "hand-tied springs." In some furniture, steel wire, metal bars, and no-sag metal webbing are being used instead of woven webbing.

Foam rubber is showing qualities of performance and adaptability to new design forms in furniture that are not found in materials like hair, cotton, sisal, Spanish moss, goosedown, and chicken feathers.

Many soil-resistant materials are now used for draperies, wall coverings, and all types of furnishings. Some of these materials are constructed of man-made fibers and plastic.¹¹

The smaller houses of today and new ideas of flexibility have resulted in furniture units which can be combined in various ways. Chairs and sofas that can be used singly and then combined to become sectional sofas; tables that can be used singly or in multiples; chests which stack or which may be put side by side to become dining-room buffets or dressers for bedrooms, are some of the designs that have been developed to meet the needs of families. The simplicity of such pieces does not mean that they are inexpensive. Only the best workmanship can make good simple furniture. Light finishes, too, may add to the cost, as only wood with flawless grain may be used. The dark

¹¹ *New York Times Magazine*, Home Fashions of the Times, March 9, 1958.

woods have a stain which may "even up" slight irregularities and so reduce the cost.

Information on Equipment for Work Areas

For the areas involving household equipment, information is more easily assembled than for the other furnishings of the house. The choices are fewer and the items are similar for all households. Industry has quite generally met the scientific specifications for equipment operated by gas or electricity. The utilities available in a community influence the initial decision on types of equipment to buy.

Each family must check the newest phases of the items to be bought and be sure that the items have been laboratory-tested. A well-established manufacturer who will stand back of his product is an important consideration when one buys any piece of equipment. It is well to remember that every standard electrical appliance has a name plate which gives essential information that can help the consumer in buying that specific appliance.


Evaluating Time and Energy Costs

New furnishings and equipment should also be evaluated in terms of time and energy costs. Frequently, the choices between two pieces of furniture or two fabrics may be made on the basis of the care required to keep them clean and looking well. Easily-cared-for surfaces and finishes and simple types of construction help lower these costs.

A study of the performance of different pieces of equipment will show that some equipment saves time, some saves energy, and some saves both. On the other hand, some pieces do not save either time or energy but are valuable because they do a better job. Cleaning the room with a modern vacuum cleaner and its attachments may take just as long and involve as much labor as cleaning with a carpet sweeper, wall brush, and duster, but the room is much cleaner.

Some of the new devices on the market perform jobs which have never been done before. Large frozen-food compartments

and freezers, automatic dishwashers, garbage disposals and electric clothes dryers are some of the pieces of equipment that are bringing new and better kinds of housekeeping to the modern home and changing the work patterns and living habits of the family.



Final Considerations Before Purchase

After getting all the information possible and canvassing the market, the family should know about what it wants and how much it can spend for it. Planning before buying and holding to the plan saves time, energy, and money. It also eliminates uncertainty, wavering, and the chances of a poor purchase.

The cost of upkeep should be considered thoroughly, since the first cost is seldom the last. Frequently, a slightly larger investment at the time of purchase will pay in the long run. For instance, a couch with a wool covering which costs considerably more than one with a cotton covering may eventually prove to be cheaper because of its greater length of service and the ease of cleaning. Likewise, a well-constructed egg beater whose cost may be twice as much as others less well-made may give excellent service for many years, whereas the inexpensive one may never be satisfactory and may need to be replaced in a short time.

When possible choices in furnishings and equipment have been determined, each piece should be judged on the basis of its suitability, durability, care or maintenance, and guarantee. The following guides for buying show in detail how these four points may be used by the consumer-buyer. They may be considered examples of the use of consumer information. Since the best way to tell the difference between good and poor furniture and equipment is to learn the characteristics of the good and to use this information as a basis for judgment, only the characteristics of high-quality articles are given in the guides.

Guide to Buying a Chair

Purpose: To find a comfortable chair for reading and resting.

Points to Look For: ^{12, 13, 14, 15}

Suitability

1. Is the chair well designed in size and shape? Is it pleasing in appearance?

Look at the proportions of back and seat, of padding to size, and at the flow of line. Consider ease of moving it.

2. Is the upholstery material appropriate in color, texture, and design?

Consider these features in relation to walls, floor coverings, and other textiles in the room.

3. Is the chair comfortable? Does it fit the body?

Sit well back in the chair. The feet should rest easily on the floor with no pressure under the knees. The backward slope of the seat and the slight slant of the back should support the body and be conducive to good posture.

Durability

Outer Covering

1. Is the chair upholstered in long-wearing material? Is the cover well tailored with little or no trimming?

Closely woven materials make the most durable chair coverings.

Frame

2. Are the exposed parts of the frame made of durable, beautiful, well-finished hardwood? Are they solid or veneer?

Find out what material has been used for finishing the wood and if it will scratch or mar easily.

3. Are the covered parts of the chair frame made of hardwood, warranted not to warp or split and to hold tacks firmly?

Find out whether the joints of the frame are doweled or dove-

¹² Florence E. Wright and Charlotte W. Brenan, *Your Money's Worth in Furniture*, Cornell Ext. Bul. 297, N. Y. State College, 1934, pp. 25, 26, 28.

¹³ Florence H. Mason, "The Consumer Speaks on Straight Chairs," *Journal of Home Economics*, Vol. 40 (December, 1948), pp. 571-572.

¹⁴ M. Attie Souder and Jean Muir Dorsey, "Choosing Chairs for Comfort," *Ladies' Home Journal* (February, 1931), p. 101.

¹⁵ J. Travell, "Chairs Are a Personal Thing," *House Beautiful*, 97, No. 10 (October, 1955), pp. 190-193.

tailed, then screwed and glued; whether the frame is reinforced with corner blocks glued and screwed in place to give strength; whether the arms are reinforced with metal where they meet the seat frame.

Webbing

4. Is the webbing of a strongly woven grade? or is a no-sag metal webbing used? Are the strips placed close together and well fastened to the frame to keep the seat in shape?

Springs

5. Are double-coil tempered steel springs used in seat and back? Are they placed close together, but not touching, and tied with eight knots? Are the outer springs reinforced with extra ties? Is the edgewire attached to the top of outside of seat springs with twine to give extra support? Are the springs covered with burlap and sewed to prevent spreading?

Check these points carefully, for they affect the resiliency, comfort, and lasting qualities of the chair.

Stuffing and Padding

6. Is foam rubber or a good grade of horsehair with burlap between layers used in stuffing? Are firm rolls of foundation padding used on the sharp edges of the frame? Is the stuffing covered with a good grade of cotton felt with a strong muslin cover over all?

Chairs are often sold in the muslin with an allowance in the price for the buyer to choose his own upholstery material.

Cushion

7. Is the cushion made of foam rubber or featherproofed ticking, channeled three or more times across, stuffed with down or a mixture of 75 percent down and 25 percent goose feathers?

Channeling keeps the feathers in place and holds the cushion in shape.

Care

1. Will the outer fabric be easy to clean? Are the colors fast? Is it mothproof?

Guarantee

1. Does the manufacturer guarantee his product and its materials? Is there a time limit to the guarantee? Does the chair have a label giving information required by the laws of the state?

The laws of many states require that any article of upholstered furniture sold must bear a tag giving: the name of the material used

for stuffing both the body and cushion; whether such stuffing is new, old, or reclaimed; and stating that the material has been sterilized.

Guide to Buying a Paring Knife

Purpose: To find an efficient and comfortable tool for paring, slicing, and dicing vegetables, fruits, and other foods.

Points to Look For:

Suitability

1. Is the blade convenient in length, shape, and thickness?

For a general-purpose paring knife a 3-inch blade is a convenient length. For rapid paring a 2½-inch blade is most efficient. A thin blade is preferable, as it is easy to control and is more effective than a thick one.

2. Does the blade taper from back to edge?

To be efficient the blade should be ground to a fine cutting edge.

3. Is the handle smooth and comfortable in size, shape, and length?

Too large or too small a handle cramps the hand and increases fatigue.

4. Do the handle and blade feel well balanced?

When the balance is right no further adjustments while paring are necessary.

Durability

1. Is the blade of high-quality steel? Will it take and hold a sharp edge?

Steel with a high percentage of carbon is the best for cutlery. It sharpens easily and holds an edge.

2. Is the handle of durable and nonabsorbent material?

Well-finished handles of rosewood, walnut, cocobolo, beech, maple, or plastic are durable.

Care

1. Is the handle firmly joined to the blade?

Tubular rivets make a more permanent joining than pin or wire rivets. A tight connection does not accumulate dirt.

2. Is the blade stainless steel? If not, can it be easily cleaned?

High-quality carbon steel may or may not be stainless.

Guarantee

1. Is the knife made by a reliable manufacturer?

The name of a reputable manufacturer is the safest guide in buy-

ing a quality product. It is usually stamped on the blade or handle or given on an attached label.

When several different makes of furniture or equipment are being compared, with the idea of buying, a rating chart which lists the desirable characteristics of the article to be bought may serve as a guide.

The homemaker who is planning future purchases of furniture or equipment would do well to have a card file where she can assemble specifications on the various articles. If such pertinent information is easily available when the time for decision comes, she will be ready to get the best value for her money.

Additional References

- AHEA Handbook of Household Equipment Terminology, January, 1960, American Home Economics Headquarters, Washington, D. C.
- Beveridge, Elizabeth, Glenn R. Hawkes, and Emil Jebe, "Carpet and Smooth Floor Covering—Maintenance Required and Satisfaction to Users," *Journal of Home Economics*, Vol. 51 (November, 1959), 780–785.
- Ehrenkranz, Florence and Lydia Inman, *Equipment in the Home*, New York: Harper & Brothers, 1958.
- Faulkner, Ray and Sarah F., *Inside Today's Home*, New York: Henry Holt and Company, 1954.
- Ferber, Robert, "The Role of Planning in Consumer Purchases of Durable Goods," *Am. Econ. Rev.*, Vol. 40, No. 5 (December, 1954), pp. 854–874.
- Gillespie, Karen R., *House Furnishings*, Englewood Cliffs, N. J.: Prentice-Hall, 1951.
- Goldstein, Harriet and Vetta, *Art in Everyday Life*, Chicago: The Macmillan Company, 1954, Fourth Edition.
- Hennessey, William J., *Modern Furnishings for the Home*, New York: Reinhold Publishing Corporation, 1956.
- Household Finance Corporation, Money Management booklets, Chicago, *Your Equipment Dollar*, 1955.
- Kinder, Faye, *Meal Management*, New York: The Macmillan Company, 1956. Chapter 10, Dinnerware.
- Peet, Louise J., "Kitchen Utensils—Selection for Optimum Use," *The Kitchen Reporter*, published by Kelvinator, 1946.
- Peet, Louise J. and Lenore Sater Thye, *Household Equipment*, New York: John Wiley and Sons, Fourth Edition, 1955.
- Peet, Louise J., *Young Homemakers Equipment Guide*, The Iowa State College Press, Ames, 1958.
- Shipley, J. R., *Interior Design*, University of Illinois Small Homes Council, Circular H1.0, 1950.

Wolgast, Elizabeth H., "Do Husbands or Wives Make the Purchasing Decisions?" *The Journal of Marketing*, Vol. 23, No. 2 (October, 1958), pp. 151-158.

Wright, Mary and Russel, *Guide to Easier Living*, New York: Simon and Schuster, 1951.

PART 5 *Other Managerial
Responsibilities
in Family Living*

18

Management of the Household and Family Transportation

RUNNING A HOUSEHOLD calls for managerial skill in the use of both the human and material resources of the family. Planning ways for members of the family to share in the work of the home, employing help when needed, planning the best use of commercial agencies, and controlling money costs for services and supplies are the major problems of operating a household.

Directing and maintaining a smooth-running home is not an easy task. For the most part this responsibility is carried by the homemaker herself, with occasional help from members of the family.

In today's home, most of the work is being done by:

1. Members of the family group—mother, father, and children.
2. Paid household help, employed and directed by the homemaker.
3. Workers, engaged, supervised, and paid by various commercial agencies in the community.¹

¹ Howard Becker and Reuben Hill, *Family, Marriage, and Parenthood*, Boston: D. C. Heath and Company, 1955, p. 545.

Family Help

In previous chapters homemaking as a cooperative venture has been discussed. When parents and children participate, such a procedure tends to unify the family. Children learn skills and something about the real problems of living. The homemaker acquires appreciable help while teaching members of the family good performance standards.

The amount of help family members contribute varies from home to home. In some, father and children find satisfaction and pleasure in helping with the actual tasks of the home. In others, the father finds relaxation and an opportunity to share in the creative activities of the family by doing things about the house, playing with the children, and making toys, furniture, and useful gadgets, and cooking. Although the amount of help each member can give may be small, the fact that the responsibility for certain tasks is carried by someone else is a great mental release for the homemaker.

The child's early training in helpfulness and cooperation also offers assistance. The tasks that older children can do are numerous. After assuming the personal care of possessions—clothing, toys, play equipment, books, work tools—children may help with running errands, caring for younger children, dishwashing, food preparation, meal planning, cleaning, mending and sewing, washing basement and recreation room floors, sweeping walks, cleaning garage and porch floors, caring for the yard and garden, and doing simple repair jobs about the house.

In a study of management in 382 rural Michigan homes in 1944, Gross found that one-fourth of the husbands helped with the general work of the house, the proportions decreasing with rise in economic level. The work contribution of children began as early as age four, increased up through age sixteen, and then decreased.²

Boys frequently enjoy the more vigorous tasks while girls often prefer those in which they have the companionship of their mothers.

² Irma H. Gross, "Management in Michigan Homes," *Journal of Home Economics*, Vol. 36 (May, 1944), p. 275.

In scheduling homemaking tasks it is well to consider the convenience of the children and avoid the friction which sometimes arises when requests require children to leave an exciting game with friends, or some highly absorbing activity such as building a house of blocks or a model airplane. A simple plan made and discussed in advance may synchronize work and play so that both may be enjoyed and protests avoided. In fairness to both homemaker and child, once a plan is made and accepted it should be considered binding. Willingness of parents to adjust their plans and occasionally to share or take over children's tasks makes for a fine working spirit in the home. Children naturally imitate the spirit with which the parents manage and do their jobs. If they do theirs well and happily, the child is more likely to feel a joy in sharing the responsibilities and work of the home.

Employed Help

When there is more work to be done than can be accomplished with the help of the family, or when the family's activities outside the home make it impossible to carry all the home responsibilities, part-time or full-time help may be the solution. Part-time service, a few hours of work each day or once or twice each week, is often all the extra help that is needed and in many places is the only type available. Full-time help, although needed, usually is too costly for the majority of families.

When the mother works outside the home, there may be need for special child care services such as nursery school or foster day care, or for domestic service. In all families with young children, some service within the home may be needed. The use of babysitters makes it possible for the parents to get away occasionally and to have some recreation.

In the first contact with paid help the homemaker will profit in the long run if she will take time to find out about the helper's training and experience and try to gauge her ability. Talking over plans and standards for doing the various tasks, helping the worker see her role in family living, and expressing appreciation for work well done usually establishes desirable

employer-employee relationships. Working out satisfactory relationships between the family and the worker is also important. No worker can do her best if she is dissatisfied with her living and working relationships in the home or with her pay or hours of work, or if the family fails to cooperate. When all of this is done, the worker is more likely to take the responsibility for her share of the work in the home and be willing to carry it happily and efficiently.

Recent census figures show that the number of private household workers is gradually decreasing. More and more older women are going into other types of work. The majority of household workers at the present time are 65 years old and over and interested only in part-time work. Teen-age girls employed as babysitters are growing in numbers.³

Giving Directions

In directing and guiding the work of the household and the activities of the family, many decisions made by the manager of the home must be transmitted into directions for carrying out certain tasks and plans. The method and manner of giving instructions and of asking help of family members or workers are of the utmost importance in gaining cooperation and in establishing happy working relationships within the group. Frequently, well-made plans are not carried out, or some tasks are left undone and others unfinished, because the manager-director has not been clear or has used a poor method in giving directions. Direction-giving should be studied until a satisfactory and workable technique is developed. Following are a few suggestions that have proved helpful to many managers:

1. Make sure that *you* understand the process before you give directions.
2. Give as few directions as possible.
3. State directions in a positive rather than a negative form. The "do" type of directions are always more interesting and challenging and less irritating than the "don't" type.

³ *Women as Workers*, U. S. Department of Labor, Women's Bureau, D-65, p. 27.

4. Be sure that directions are clearly understood by the person who is to carry them out.

5. Make clear to the one who is carrying out the directions the degree to which personal judgment and initiative are to be used. This may avoid disappointment with final results.

6. Seek cooperation by using a courteous, cheerful, considerate tone of voice and bearing in giving directions or in asking for help. This frequently conditions the response one receives.

7. Show or express appreciation of work well done.

Commercial Agencies

Services provided by professionals outside the home are really invisible helpers. For the most part they do many things better than they could be done in the home.⁴

The commercial laundry can do all of the wash, or just part of it. The homemaker may decide between several types of laundry service, or she may use more than one type. The large laundries pick up and deliver bundles of various sizes. The customer may specify "wet wash," "rough dry," "family finished," "complete finished," or "custom work." The self-service and quick-service laundries take laundry brought in by customers, process it, and have it ready when the customer calls back. Different types of service are available. In many cities a mother may engage diaper service for any period of time she wishes.

In some cities homemakers can get all of their household linen on rental instead of owning any. The rental is paid on a piece basis. Prices vary slightly but a typical list would run: sheets, 20 cents each; pillow cases, 10 cents; bath towels, 8 cents; hand and dish towels, 5 cents. Many families like the linen rental service because it is a saving in immediate cash, and because it frees closet space that would be used by the family's own linen.

Dry-cleaning agencies help solve the clothes cleaning problem. Drapes, upholstery, and rugs can be sent out or done at home by special services.

⁴ Mary and Russel Wright, *Guide to Easier Living*, New York: Simon and Schuster, 1951, p. 154.

Appliance servicing, which is a fast growing enterprise, may be done by the company's own employees or by an appliance service agency.

Window-washing and house cleaning can also be done by specialized groups.

Household Operating Costs

A large number of related demands upon the family resources can be classified into one group of expenditures. These are the outgrowth of the situations or problems that arise in operating or running the house and the household. These expenses differ somewhat from other types of family expenditures in that a wide variety of separate items, each of which is used by a number of individuals in the household, is represented in the group. This is one category in financing a family in which other persons associated with the home, as well as family members, may affect costs. These other persons include guests, visiting relatives, part- or full-time workers and even servicemen.

What are the items in this diverse group of expenditures? Ordinarily they include such goods and services as electricity, gas, coal, or other fuels for heating, lighting, and water. They also cover full- and part-time help; telephone; laundry service; miscellaneous household supplies, of which there are a large number; garbage disposal; and other minor operating expenses. Fire and other types of protective insurance are usually included in the group.

Some families consider transportation as an operating expense, feeling that a house some distance from work or school gives rise to extra costs that should be considered as a house-operation cost. Others believe the cost for transportation is important enough to be segregated and brought into focus as a separate category. (See page 438.) In this way family members can be made aware of this type of expenditure. Particularly is this true where the family operates an automobile.

Many families find it hard to estimate the amount of money needed for operating the household, since the needs of the group are constantly changing.

The Heller Committee in a study of the cost of living in San Francisco Bay Area in September, 1957, estimated that the annual household operation costs for a salaried worker's family run around \$414. For the wage earner's family the annual cost is about \$218.⁵

Knowledge of the various facilities available is essential for efficient and economical operation of the household. Management of household operation costs is conditioned by the attitudes of family members and their willingness to help in solving these ever-present problems.

Control of Money Costs of Operating a Household

In considering the problems of the control of operating expenses, the analysis should first inquire into their nature. They can be classified into two types: (1) fixed and (2) variable.

A *fixed cost* in operating the household is one that is contracted for at a given rate. Since it is invariable, it can be planned for in advance. Fixed operating costs in the home include regular service arranged for at a given time and wage, either hourly, daily, or weekly; minimum public utility rates, when less than minimum quantities are used; telephone rates when telegrams and toll calls are not added; fire insurance; and personal care when allocated at a given amount per person. The more operating costs a family is able to bring into the fixed group, the simpler becomes their control.

All other money costs of operation will fall into the *variable class*. Variable costs are those that are not contracted for at a regular rate and will change from month to month, depending upon the use of the goods or services. In most homes these are represented by such items of expenditure as labor by the hour when a time limit is not specified; public utilities (electricity, gas, water); care and repair of household linens and furnishings; repair and upkeep of equipment; household supplies (soaps, cleansers, toilet paper, etc.); fuel; laundry services; personal care where not included as a regular allocation per person; and other small or minor items such as postage and stationery. The items

⁵ *Quantity and Cost Budgets for Two Income Levels*, The Heller Committee for Research in Social Economics, University of California, Berkeley, pp. 30, 67.

classified as minor depend upon the pattern of living of the individual or family.

Many of the running expenses that fall in the variable class can be brought under control so that they have a narrow range of variability from month to month. Each family can set this range through a study of these expenses and an adjustment of individual costs from time to time. These costs then become predictable within a narrow range of error and can be more easily planned for in advance. The costs of household supplies and repairs on equipment are the most difficult ones to control. Controlling the amount spent on many items is often a matter of training in cooperation and the development of a sense of personal responsibility by each member of the family to the family as a whole.

Protective Insurance an Operating Cost

Most modern families carry various kinds of household protective insurance. The carrying of insurance represents an effort on the part of the family to protect the value of its possessions in case of disaster or theft. A wide variety of insurance coverage is available. The kind most commonly carried is that against fire damage, wind, hail, and water damage, vandalism, and burglary. Losses from these causes can be covered by separate policies or by policies covering a combination of causes, such as fire, wind, and water, or a comprehensive policy can cover all the above hazards.

The amount of protective insurance carried by any family depends upon the cautiousness of the husband and wife; the local protection afforded by the community services, such as fire and police departments; the total value of possessions and the money available for family living.

Time and Energy in Operating a Home

When a family is working to control household operation expenses, the somewhat less obvious time and energy costs are frequently overlooked. Considerations of time and energy enter into the amount spent for a number of items of operation, such as the amount and kind of fuel, amount and kind of help, type

of laundry service, and often into the quality of household supplies.

The choice between two qualities of a particular commodity used in operating the home may be influenced as much by time and energy costs as by the money cost. For example, the family may choose to burn a good grade of coal instead of a cheaper grade, not only because it has more heat units, but also because the time and energy in cleaning up after its use will be less for the good grade than for the poor. The decision may result in higher money costs but lower time and energy costs.

Time and energy costs of certain other choices made by the family may influence the amount spent on running the household. An example is the choice of finish for the woodwork in the house. One type of woodwork may require considerably more work in its care than another. If the first type is chosen, unless some family member takes the responsibility for the added work, more help will be needed and the cost of operation will increase. Or one type of finish might require a special quality of material in its care which would add to the cost of household supplies.

Control of the time and energy costs in operating a home results from a conscious weighing of the use of time and energy against money costs as all goods and services needed for household operation are decided upon.

Management of the Family Automobile Costs

Owning a car is a necessity for most families, a convenience for others, and a pleasure for many. Nowadays a car is an accepted fact with most families. A survey of car ownership at different stages of the family life cycle shows that a car is one of the first family purchases. (See Table 29, Appendix.) Eighty-two percent of young married couples without children own a car, and by the time the youngest child is 6 years old or over, 91 percent of the couples own cars. In the older married group the proportion of families owning a car tends to decline.

Payments for cars and their upkeep take a large share of today's family income. How much a family can afford to spend for a

car depends largely on its annual income and the other expenses that must be met while the car is being paid for.

According to a recent report of the Heller Committee, the cost of car ownership is rising. Among all family expenditures the automobile now ranks third. (See Figure 46, Appendix.) For many families this means an adjustment in other expenditures and a tightening up of the budget. Or it may mean buying a lower priced new car or a used car for some families.

Budgets showing automobile costs for salaried and wage-earner families in the San Francisco Bay Area were reported by the Heller Committee as follows:

ANNUAL AUTOMOBILE BUDGETS *

	Salaried Worker (New car purchased every 6 years)	Wage Earner (Used car purchased every 4 years)
Installment purchase of a new car	\$423.85	\$131.83
Operating cost for 7,000 miles per year	234.69	264.08
Insurance	121.17	102.76
Fee and licenses	31.09	14.35
Other	13.65	
Total	\$824.45	\$513.02

* *Quantity and Cost Budgets for Two Income Levels*, The Heller Committee for Research in Social Economics, University of California, Berkeley. Prices for the San Francisco Bay Area, September, 1957 (including sales tax). Condensed from material on pages 41 and 77.

These figures show that the annual cost of automobile replacement, operation, and other expenses for the salaried worker, who purchases a new car every 6 years, is \$824, or 10.9 percent of his yearly salary. For the wage earner, who buys a used car every 4 years, the annual cost is \$513, or about 8.6 percent of his yearly income. (See Figure 46, Appendix, page 509.)

Financing Costs

Most automobiles are purchased on credit. Since the cost of this method of purchase is a big item in the cost of buying a car,

the buyer should understand how to calculate the cost of his car to see that it includes both the purchase price and the credit privilege. Knowing such a technique, he will do well to shop around for the best buy in credit as well as the best buy in make of car.

The method of calculating the financing cost should include, in addition to the price of the car, the terms the dealer proposes, the total cost including all extras and taxes (state and federal), insurance charged during payment period, any extra fees added on, and the financing charge for the period of payment. With these data the cost of financing can readily be computed. The chart on page 441 is suggested as a means of computing the cost under a dealer's arrangement as well as under other sources of credit. The actual figures given here are of secondary importance.

Having decided upon the best buy in terms of financing cost and purchase price, the family then has the management problem of planning for the use of available income so that monthly payments can be made, and of planning for another important automobile cost often ignored, the current operating costs, commonly called "running expenses."

Planning for Car Expenses

The annual costs of car ownership and maintenance which must be considered in planning the family's automobile budget include: (1) the price paid for the car, which may be spread over several years as depreciation costs, depending on how long the family plans to drive the car; (2) the fixed expenses, which include such items as installment payments on the car, insurance, both state and city license fees that occur at regular intervals during the year, or annually; (3) the flexible expenses which are the day-to-day costs of operating and maintaining the car. The latter include the gasoline, oil, tire, and maintenance costs, all of which vary from month to month. Credit cards and monthly bills are a help in estimating the annual costs of these items. The cost of gasoline per mile can be obtained by dividing the number of miles one gets per gallon from the car into the cost per gallon of the kind of gas used. Oil costs may be estimated at about 0.1 cent per mile; tire costs at 0.4 to 0.5 cent per mile; maintenance

CAR FINANCING CHART *

(Adapted from *Changing Times*, the Kiplinger Magazine, October, 1953)

Facts You Need		Example	Dealer's Arrange- ment	Bank	Other Source
Terms		$\frac{1}{3}$ down, 24 months, 5% interest a year			
Total cost of car, including all extras and taxes		\$2200.00	\$	\$	\$
Deduct down payment:					
Trade-in allowance	\$600.00				
Cash	133.34				
Total		733.34			
Balance due after down payment		\$1466.66	\$	\$	\$
Insurance costs over contract period		140.00			
Total fees for credit investigation and other services		2.00			
Total amount (principal) to be financed		\$1608.66	\$	\$	\$
Financing charge over period of pay- ments (Sample figure, 2 years @ 5%)		160.87			
Total amount owed on contract		\$1769.53	\$	\$	\$
Number of monthly payments		24			
Amount per payment		\$73.73			

* *Money Management—Your Automobile Dollar*, Household Finance Corporation, Chicago, 1958, p. 19.

costs at 0.7 cent per mile for a low-priced car, and 0.8 cent for a heavier, higher-priced car, and an additional 0.1 cent per mile for miscellaneous expenses.

A car begins to depreciate as soon as the family drives it. The depreciation is greatest during the first year and then gradually decreases. The approximate amount of depreciation on a car can be found by subtracting the estimated car trade-in value from the purchase price of a new car. The annual depreciation can then be figured by dividing the total depreciation by the

number of years the car has been driven, plus the additional years the family plans to drive it. The chart on page 443, which is based on the car's annual mileage, may be used to estimate the annual costs of the car. In the year in which a car is bought the amount budgeted for the car may well be increased. The cost of operating and maintaining the car may be kept at a minimum through proper care of the car.

Controlling Operating Costs

Controlling the daily expenses of the family car calls for co-operative effort on the part of all family members who drive it. Of course, one of the first ways to control operating costs is in the original choice of the car. The size and horsepower of the automobile condition the fuel consumption, a large item in daily car expense. Cars of similar horsepower may even show different fuel consumption. Investigating the fuel use before purchasing a car is a practical means of determining costs. The age of a car often affects its fuel consumption. The advantages of buying a used car may be lost by its fuel demands.

Another control measure involves good habits of care and use. The family that regularly services its car, protects it through housing or by a protective coating, and in general keeps it in good running condition will get longer wear and have a so-called clean car when the time comes for a turn in.

No piece of equipment owned by the family gets harder use than its car. So many persons use it in so many different ways. Because of this, each member of the family asking for the privilege of sharing in the use of the car should be willing to develop good driving habits and be respectful of both laws and other drivers.

Insurance on the Automobile

When a car is bought, it is important that the right kind and amount of insurance be carried in order that the owner will have financial protection against injury or damage caused to someone else or his property, and to himself and his property. Damage to either the owner's car or another's car, or both, may mean costly repairs. Bodily injury to someone in the owner's car, or

ANNUAL COSTS OF OWNING AND OPERATING A CAR *

	Estimated Figures		Actual Figures	
	Annual Mileage_____		Annual Mileage_____	
	Cost per Year	Cost per Mile	Cost per Year	Cost per Mile
1. Depreciation	_____	_____	_____	_____
Fixed Costs				
2. Installment Payments	_____	_____	_____	_____
3. Insurance	_____	_____	_____	_____
4. License Fees	_____	_____	_____	_____
5. Garage Rent	=====	=====	=====	=====
6. Total Fixed Costs	_____	_____	_____	_____
Flexible Costs				
7. Gasoline	_____	_____	_____	_____
8. Oil	_____	_____	_____	_____
9. Tires	_____	_____	_____	_____
10. Maintenance (including repairs)	_____	_____	_____	_____
11. Miscellaneous	=====	=====	=====	=====
12. Total Flexible Costs	_____	_____	_____	_____
ANNUAL CAR COSTS (Total lines 1, 6, and 12)	=====	=====	=====	=====
MONTHLY CAR COSTS				
For Depreciation (Divide amount in line 1 by 12 months)	_____	_____	_____	_____
For Fixed Costs (Divide amount in line 6 by 12 months)	_____	_____	_____	_____
For Flexible Costs (Divide amount in line 12 by 12 months)	=====	=====	=====	=====
TOTAL MONTHLY COSTS	_____	_____	_____	_____

* *Money Management—Your Automobile Dollar*, Household Finance Corporation, Chicago, 1958, p. 29.

in another car, can end in heavy medical expenses and even a lawsuit for settlement of damages.⁶

There are three types of automobile insurance which offer protection against the expenses which may result from an accident.

Liability insurance protects the car owner against the injury or damage claims of *another* person resulting from an accident caused by the owner's car. This protection covers bodily injury, and property damage. In addition to this there is optional coverage for medical payments.

Comprehensive or fire and theft insurance pays for direct or accident loss of, or damage to, one's car for any cause other than collision or upset. The protection may include loss or damage due to fire and theft, glass breakage, vandalism, windstorm, hail, flood, smoke, falling objects. . . .

Collision insurance provides payment to a car owner if his car strikes or is struck by an object or other car, or if the car skids off the road and turns over. Before taking out insurance, one should shop around and compare costs and coverages of different policies. The company's reputation and fair settlement of claims should also be checked.

Human-Relationship Aspect of the Family Car

Few items in modern living have given rise to more difficult management problems for parents than the family automobile. Although the problems are many, in general they can be classified into three groups: (1) those which predominantly affect human relationships; (2) those which relate to money costs; and (3) those which affect changes in time and energy patterns of family members.

A not unfamiliar scene at the dinner table of any American family is the discussion of who will have the use of the family automobile. Father has a civic committee meeting until 9:00; Mother has an adult class at the school; Jane, age 18, has an all-girl club meeting from 8:00 to 11:00; and Eric, age 16, has a date. Who shall have the car?

⁶ *Money Management—Your Automobile Dollar*, Household Finance Corporation, Chicago, 1958, pp. 20-23.

The family automobile is shared by all members of the family as a group, yet its use also satisfies insistent personal wants. The immediate desire for the use of the car is intense for the individual, particularly for the youthful members. This situation is not the same for other goods shared in common, as for instance the house, the yard, or the dining table. A family member may accept graciously joint use of the living room, may expect group use of the dining table, and yet be quite resentful at times in having to share the use of the automobile.

The conflicts that arise from the desire for personal use of the family-shared automobile *can* be resolved to the satisfaction of all if group understandings are developed and become a part of the family attitudes and philosophy. How such group understandings can be brought about is suggested here:

Group understanding comes through group decisions about the use of the car and in making plans for its use. The result is an understanding of why one person should have its use instead of another.

A fair distribution of the car's use will aid in satisfying all members. An example of this is the family in which sisters by arrangement use the car on week nights, leaving it for the brother for Friday or Saturday nights.

A fair give-and-take in arranging for the use of the car for important occasions will be essential. An example of this is the brother who gives up all claims to the use of the car during the freshman sister's sorority rush week. Another example is the parent who uses the taxi or bus instead of claiming a part use of the car when, on important occasions, the children want the car.

Dovetailing the use of the car by several persons during one period of time is yet another method of resolving a complicated conflict. The working out of the family problem mentioned previously can be cited as an example. Father and Mother can be taken to their meetings by Jane. Eric can take Jane to her club meeting at 8:00 and she can come home with one of the girls. Eric can pick up his date, then call for Mother and Father and deliver them at home. Then he can have the car for the rest of the evening. In some homes this dovetailing process mounts almost to traffic-manager proportions.

Developing in family members a feeling of pleasure in the pleasures of others is another important step toward group understanding.

This is a natural state of mind of parent for children, but is not always found between brothers and sisters. It is an attitude that can be developed and is important when meeting situations brought about by the use of the family car.

Effect of the Family Car on Time and Work Patterns

The effect of the automobile upon the time and work patterns of family members can be readily observed. Although no studies have been made to measure the extent of the effect, observation will bear out the fact that some of the evidences of the impact are unfavorable.

The automobile speeds up the whole tempo of a family's life. Time is saved at one or more points in the day's routine and this makes it possible to crowd in other activities, both for individuals and for the group. The result has been ever-widening interests competing for time and energy. Where there has been no car in the family, the new car changes the tempo so gradually that the family is frequently not aware of what is happening. Families that have always had a car are often unaware of the effects of the car upon the time and energy use of its members.

Some of the specific evidences of the change in time and work patterns in the family are reviewed below.

For the woman homemaker, the automobile has made possible a widening sphere of interests and an opportunity to take part in "extra-family" activities that she would not otherwise have had. This participation is beneficial both to the family and to herself. When broadened interests reach the point of scattered interests, the effect upon the family group may be less favorable.

The time and work pattern of the mother is the most flexible of any member of the family. She does not have as definite a time for her work as that imposed by the hours of school for the children or occupational hours for her husband. As wife and mother she is called upon to adjust the home hours to fit hours imposed by the outside world. Because her schedule has this greater flexibility, she is frequently called upon to "take and bring" members to school, to work, to meetings, etc. The

results of disturbing her time and work pattern may give rise to nerve strain and tensions.

While the family car saves time and energy, it can also lead to false or overrationalized economies. Careful check is needed to avert this situation. Probably the most common example is in trying to save a few pennies by looking for a bargain. Time and energy can be wasted in "shopping around," and the cost of gasoline may equal or exceed the saving in cents on the purchase. If the family will compute the added money costs and the time and energy consumed, they can readily appreciate the extent of the false economy.

Additional References

- Becker, Howard, and Reuben Hill, *Family, Marriage and Parenthood*, Boston: D. C. Heath and Company, 1955, Chapter 18.
- Bigelow, Howard F., *Family Finance*, New York: J. B. Lippincott Company, Revised 1952, pp. 222-256, Chapters XI, XII.
- Clark, Lincoln H., *Consumer Behavior*, New York: Harper Brothers, 1958, Chapter 11, pp. 69-92.
- Sleeper, Harold R. and Catherine, *The House for You*, New York: John Wiley and Sons, 1948, p. 264.
- Troelstrup, Arch W., *Consumer Problems and Personal Finance*, New York: McGraw-Hill Book Company, Second Edition, 1957, pp. 383-385.

19

Food Management

FOOD MANAGEMENT INVOLVES the managerial problems that have to do with feeding the family. These problems are a part of everyday living and management. The providing of food that will ensure the physical and mental growth of the family, its social development and well-being, with a reasonable expenditure of available resources, is the goal of food management.

Many managerial decisions must be made in providing, preparing, and serving food for the family. Decisions begin with the setting of nutritional standards and the planning of meals to meet these standards. They lead on to planning the amount that can be spent for food, the making of market lists, choosing the markets, and buying and storing food supplies. Then comes planning for the preparation and serving of the meals. These are the major activities in food management that must be carried to completion by all homemakers. They are common to all stages of the family life cycle.

The problems of food management increase with the coming of children. This is especially true when the mother carries the dual role of a paid worker and homemaker. No easy way to solve food-management problems exists no matter what the size of the family. Problems are solved only through thinking, weighing values, and using resources in terms of goals in family living.

Family Resources in Food Management

In stating the goals of food management the expression *reasonable expenditure of resources* is used. What constitutes a reasonable expenditure for a given family can be arrived at only through careful analysis and planning by the manager in her own home.

Both human and material resources are needed to solve the food management problems. Knowledge is one important human resource. It should include knowledge of nutrition, of the amount of income available for food, of the different kinds of food and how to prepare and serve them, of food prices, of general market conditions, and local shopping facilities. Other resources needed are the abilities and energy of the homemaker to coordinate the flow of adequate supplies and their preparation into meals.

The effective use of time helps the homemaker to develop a smoothly operating household. The more she knows about the time required to do each task connected with food buying and preparation, the better will be the management of this resource.

The material resource money determines the types of food the homemaker will select for her family, the markets she will use, her methods of buying, and whether and to what extent she will need to substitute other resources for money, if that is limited.

The solution of the food-management problem varies from home to home because of the difference in the supply of these human and material resources. If one or more of the resources are limited in amount, the lack may be a challenge to the homemaker to compensate for it in some other way. In food management the more able a person is in using resources alternatively, the greater will be the returns in satisfaction. Because such a large part of the money income of the majority of families goes for food, no area in homemaking demands more careful planning than food management.

Food Planning

In the midst of our great supplies of food the question, "Are we well fed nutritionally speaking?" is ever pertinent. The answer according to a nationwide survey of household food consumption made by the Department of Agriculture in the spring of 1955, was that, in general, diets in this country are nutritionally better than those noted in earlier investigations, but many still need to be improved.¹

Special note should be made that 29 percent of the family diets did not meet the standard for calcium recommended by the National Research Council, and 25 percent were below the amount recommended for ascorbic acid. From 15 to 20 percent of the households had diets below recommended levels in vitamin A, thiamine, and riboflavin. About 90 percent had food furnishing recommended amounts of protein, iron, and niacin.²

One of the conclusions reached by three nutritionists regarding the life cycle and its diet was, "There is good evidence that once dietary patterns have become fixed, they tend to be followed for long periods of time, perhaps a lifetime. Therefore, it becomes the responsibility of all who are in a position to influence the food habits of others—particularly children—to plan, prepare, serve, eat, and teach a good diet. At present this appears to be a diet relatively high in protein, minerals, and vitamins with careful calorie adjustment with age and activity."³

In answering the question, "What do we wish to achieve in building good food habits?" Breckenridge writes, "We wish a child to have (1) a good appetite, that desire for food based on pleasant associations; (2) the experience of eating and enjoying the foods which furnish a well-balanced diet; (3) an interest and willingness to eat a widening variety of foods so that he is guar-

¹ Faith Clark, "Family Diets Today," Proceedings of Nutrition Education Conference, April 1-3, 1957, Washington, D. C., U. S. Dept. Agr. Miscellaneous Publication No. 745, p. 3.

² *Ibid.*, p. 3.

³ Helen A. Hunscher, Ruth M. Leverton, and Dena Cederquist, "The Life Cycle and Its Diet—A Symposium on Recent Findings in Human Nutrition," *Journal of Home Economics*, Vol. 49 (February, 1957), p. 112.

anteed an adequate diet. . . .”⁴ Good food habits are one of the important means of assuring a child a well-balanced diet for his health and growth.

Planning for Good Nutrition

A daily food plan to help individuals choose a nutritious diet has been prepared by the United States Department of Agriculture home economists. This plan indicates the kinds of commonly used foods that are important sources of major nutrients. These nutrients, proteins, minerals, vitamins, fats, and carbohydrates, are the essentials of an adequate diet. Most foods contain several nutrients, but no single food has all that are necessary to maintain good health. It is easy to obtain the nutrients needed if foods from each group in the food plan are eaten each day in the amounts suggested.

A DAILY FOOD PLAN⁵

Milk Group: Some milk daily—

Children	3 to 4 cups
Teen-agers	4 or more cups
Adults	2 or more cups
Pregnant women	4 or more cups
Nursing mothers	6 or more cups

Cheese and ice cream can replace part of the milk.

Meat group: 2 or more servings—

Beef, veal, pork, lamb, poultry, fish, eggs, with dry beans and peas and nuts as alternates.

Vegetable-fruit group: 4 or more servings, including—

A dark-green or deep-yellow vegetable important for vitamin A—at least every other day.

A citrus fruit or other fruit or vegetable important for vitamin C—daily.

Other fruits and vegetables including potatoes.

Bread-cereals group: 4 or more servings—

Whole grain, enriched, restored.

The minimum number of servings given in the daily food plan forms a *foundation* for a good diet. Many people will use more

⁴ Marian E. Breckenridge, "The Road to Good Food Habits," *Kitchen Reporter*, published by Kelvinator Kitchen, February, 1947.

⁵ *Essentials of an Adequate Diet*, Agriculture Information Bul. No. 160, Agr. Research Service, U. S. Dept. of Agr., November, 1956, p. 1.

of these foods as well as others not specified, such as fats of various kinds, sugars, and syrups, and unenriched refined grain products. These foods are not included as a group in the food plan because they are often ingredients in baked goods, desserts, and mixed dishes. Fats, oils, and sugars are also added to many foods during preparation and at the table. Their nutritional value is mainly in calories.

The different food groups listed in the daily food plan have special jobs to do in supplying an adequate diet. In the number of servings listed and the choices shown, these food groups together furnish a major share of calcium, protein, iron, vitamins A and C, and the B vitamins recommended by nutritionists. These foods also supply other vitamins and minerals as well as fats and carbohydrates necessary for good nutrition.⁶

The daily food plan given here shows one way to choose the kinds of foods that are especially important nutritionwise. The plan suggests a diet pattern that will provide for the nutritional needs within the framework of customary food habits and available food supplies. It is an excellent guide for homemakers who need help in making their daily food plans.

Planning Meals

There are different ways of planning meals. Some homemakers like to make plans just before mealtime, building the menu around the food supplies on hand. Some homemakers would rather plan meals for two or three days ahead, and others find it easier to plan for a week or more in advance. Last-minute planning often results in meals that do not meet the nutritive needs of the family. Such meals are expensive as a rule, since they usually include the better cuts of meat that can be quickly cooked, frozen vegetables and fruits, and ice cream and other desserts bought at the store.

The homemaker who takes time to plan meals in advance learns to think in terms of *daily food plans* and ways of providing an adequate diet for her family. This type of planning usually results in the selection of a wider variety of foods, and more home-prepared foods that the family enjoys and often helps prepare.

⁶ *Ibid.*, p. 1.

Foresight in food planning helps a homemaker to control the type of food she chooses in the market, the family's diet pattern, time and energy costs in food preparation, as well as food costs.

In planning menus it is important for a homemaker to know how much money per week is available for food. Sometimes it may be desirable or even necessary to lower food costs on one day in order to balance higher food costs on another day.

The following suggestions will serve as a guide in making daily food plans:

Plan meals that meet the daily nutritional needs for all members of the family.

Plan several day's meals at one time.

Plan simple menus that are easy to prepare and serve.

Plan different methods of food preparation for the various meals.

Plan meals that have interesting variety in color, texture, and flavor.

Planned Shopping

Once menus are planned, it is easy to make a shopping list of the foods that are needed and supplies that must be replenished. A carefully planned and well-arranged list saves times in the stores and helps the homemaker keep within her food allowance. It also ensures the purchase of the right amounts of food, and often saves money by preventing "impulse" buying.

When other members of the family are doing the shopping, the list should indicate the quantities and sizes of cans and packages needed, as well as brands or grades preferred. A note as to possible substitutions that may be made in buying certain items is also helpful.

Shopping on days and hours when business is the lightest enables one to obtain better and quicker service at the stores.

Money Costs of Feeding the Family

The question, "How much of the family income should be spent for food?" is one that must be answered by each individual family. No two families spend their money in the same way,

and the amount spent for food may vary from time to time. Clark⁷ reported that the average expenditure for food by families of two or more persons in the United States in the spring of 1955 was about \$1.25 a day for each person. By 1957 the price of food had increased, and the daily cost per person rose to \$1.30.

The Heller Committee for Research in Social Economics in a study of the cost of living for families on two income levels in the San Francisco Bay Area in September, 1957, estimated that the food costs for a wage earner's family of four persons with an annual income of \$5,832 would be about 29 percent of the income. For a salaried worker's family of four persons with an annual income of \$8,885, they estimated the cost would be about 25 percent of the income.⁸ (See Table 46, Appendix, page 509.)

Although these figures may be helpful, it is up to each family to decide for itself the amount it can spend for food. By studying its spending practices and keeping records of its expenditures a family can learn to live within its food budget.

The *buying habits* of the homemaker, because she is food-purchasing agent for the family, have a striking effect upon food costs. The amount and quality of goods purchased with the dollars spent depend in large measure upon her knowledge, the efficiency of her choice of market, and her ability to select food wisely within the market she has chosen.

The homemaker who wishes to control her food costs will want to analyze her buying habits to see whether she is (1) buying to get the best dollar values; (2) buying at the best time considering all factors at home and in the market; (3) buying in the optimal quantity; (4) using an economical method of payment for her food purchases, (5) getting the quality she should for the dollars spent; and finally (6) choosing sensible quality for each use and not using the highest grades for all purposes, which may be extremely wasteful.

⁷ Clark, *op. cit.*, p. 2.

⁸ *Quantity and Cost Budgets for Two Income Levels*, The Heller Committee for Research in Social Economics, University of California, Berkeley. Prices for the San Francisco Bay Area, September, 1957 (including sales tax), pp. 17, 56.

Management in Food Preparation

Time-use studies have shown that a homemaker uses more time in food preparation activities than in any other kind of work. Keeping food costs within the family budget takes additional time and thought. How to plan and serve attractive and nourishing meals with a reasonable expenditure of the family resources is the daily management problem of all homemakers.

Today there are many partially prepared and ready-to-serve foods on the market to help homemakers streamline food preparation. Some of the most important convenience foods are not new. Well-established easy-to-serve foods such as bread, baked goods, ice cream, ground beef, frankfurters, luncheon meats, canned soups, jellies, and jams are used by many families. The acceptance and use of new convenience foods such as frozen concentrated fruit juice, frozen fruits and vegetables, various cake and other mixes, instant coffee, and brown and serve rolls are increasing rapidly. This list might include the ready-prepared food mixtures, ready-to-serve salads, Chinese style foods, frozen meats, and frozen ready-to-serve main course dinners, frozen meat and fruit pies, as well as many others.

Time and Cost Studies of Homemade and Commercial Mixes

In order to plan wisely, homemakers today need to know the relative time and money costs of preparing foods at home and purchasing them partially prepared or ready to serve.

A study of money and time spent in preparing baked products from individual and premixed ingredients was reported by Asp, Noble, and Clark.⁹ The products studied were cake, chocolate chip cookies, baking powder biscuits, and pie crust made from individual ingredients, homemade mix, and commercial mix. In general, the data show that the homemakers who participated in this study saved money by increasing the time they spent in the home preparation of these baked products, and that they saved time but increased the cost by the use of commercial mixes.

⁹ Elaine Asp, Isabel Noble, and Faith Clark, "Pilot Study of Money and Time Spent in Preparing Baked Products from Individual and Premixed Ingredients," *Journal of Home Economics*, Vol. 49 (November, 1957), pp. 717-719.

In any event, homemakers must make their own decisions as to which is more important to them—time or money.

Morrison¹⁰ reported a study in which she examined the possibility of preparing and storing conveniently a home mix for chocolate cake which would (1) compare favorably with a chocolate cake made according to a standard home recipe by a standard mixing technique; and (2) surpass in palatability, and, if possible, be lower in cost of ingredients and in preparation time than chocolate cake made from one of the more highly rated purchased premix chocolate cakes.

The results of this study showed that the cake prepared from the home premix was the least expensive, was highest in palatability scores, and second to the commercial mix in preparation time. Preparation time for the home dry mix was considerably shortened by the making of triple batches. The control cake took the longest to prepare, but ranked very close to the home-mix cake in cost. The commercial mix cake was the most expensive, took the least time to prepare, and was lowest in palatability scores.

A comparison of the time and money costs of meals using home-prepared foods, partially prepared, and ready-to-serve foods was made by Weiss.¹¹ This study differed from those of individual foods in that they were combined into menus, thus showing the importance of each food in the day's meal preparation.

Menus for two days for a family of four were planned and prepared. The home-prepared meals cost \$4.90 for a family of four for one day and required a total of 5.5 hours for preparing, cleaning up, and serving. The partially-prepared meals cost \$5.80 and required 2.9 hours to prepare, serve, and clean up, and the ready-to-serve meals cost \$6.70 and took 1.5 hours to prepare, serve, and clean up.

The home-prepared meals thus cost 90 cents less than the partially-prepared meals and \$1.80 less than the ready-to-serve meals. But they took 2.4 hours longer to prepare than the par-

¹⁰ Mary Helen Bradley Morrison, "Ready Mixes for Chocolate Cake," *Journal of Home Economics*, Vol. 49 (April, 1957), pp. 283-285.

¹¹ Gertrude S. Weiss, "Time and Money Costs of Meals Using Home and Pre-kitchen-Prepared Foods," *Journal of Home Economics*, Vol. 46 (February, 1954), pp. 98-99.

tially-prepared meals and 3.9 hours longer than the ready-to-serve meals. These figures show that the saving in time from using prepared foods is large compared with the extra cost. However, the importance assigned to time, on the one hand, and money, on the other hand, is an individual and family matter. Homemakers who have heavy demands on their time during the day, and homemakers with paid employment usually find that the only way they can prepare satisfactory meals for their families is by using prekitchen-prepared foods. Homemakers who have more free time may prefer to combine home-prepared foods with some of the prepared foods.

Management in Meal Preparation

Meal preparation is both complicated and attention-demanding. In preparing the simplest meal it is necessary to assemble supplies, dovetail operations, judge the progress of cooking food, make frequent inspections, set the table, and have the food prepared and ready to serve at the desired time. In preparing any meal, a homemaker must first estimate the preparation time of each food. This will show the time it will take to prepare the meal, as well as suggest the best time for doing the various food preparation tasks. This is illustrated in the following menu:

Dinner Menu	Preparation Time in Minutes	Work Schedule
Baked ham (precooked)	90	Put ham in oven at 4:30
Candied sweet potatoes	40	Pare and cook potatoes
Buttered green peas (frozen)	7	Prepare brown sugar syrup
Apple and lettuce salad	10	Prepare salad and chill
Hard rolls	4	Set table
Pecan ice cream	5	Cook peas
Coffee (percolator)	12	Put salad and rolls on table
		Pour water
		Start coffee
		Serve ham and vegetables at 6 o'clock

A glance at this menu will show that the baked ham will take the longest preparation and cooking time. This will set

the time and preparation pattern for the meal. After being cooked, the sweet potatoes will be covered with brown sugar syrup and placed in the oven. The salad preparation will follow and then the frozen peas will be cooked. The rolls and ice cream will require no preparation in advance. The coffee will be made and served with the dessert.

The work schedule suggests the order of work. An inexperienced person may wish to make a more detailed time plan until she has developed managerial and manipulative skills. The experienced homemaker can make these time estimates in a glance and quickly fit this pattern into her daily activity plan. (See page 123.)

This menu shows how kitchen-prepared foods can be combined with partially-prepared and ready-to-serve foods to reduce meal preparation time. If one wished, further time could be saved by baking the sweet potatoes in the oven with the ham.

The foods included in any meal and the way the meal is served help determine the number of dishes and utensils to be washed. For example, sweet potatoes can be baked on a rack in the oven, while the preparation of candied sweet potatoes involves several operations and the use of different utensils that must be washed. A minimum of dishes and silverware also saves clean-up time.

Efficient practice in cleaning up after meals includes: (1) washing dishes and pans used in food preparation as work is being done; (2) using a tray or tea wagon to serve and take dishes and food to the kitchen; (3) scraping and rinsing dishes immediately; and (4) washing, rinsing dishes, and allowing them to drain without wiping, or placing dishes in the dishwasher to complete the process.

Controlling the Use of Time and Energy in Feeding the Family

How to control and lower time and energy costs in feeding the family is a major consideration of every homemaker. In many homes the attitude toward the food responsibility is often the cause of wasted time and energy. If the homemaker dislikes or feels superior to the responsibility or has the feeling of a

martyr toward it, the time and energy input will be affected because of tension, feeling of fatigue, and slowed reaction time. She can, on the other hand, look at her food responsibility, repetitive though it be, as one which must be met; she can bring to it the best of her ability, adding daily the mastery of one or another element of her situation. She can admit to herself that her unfavorable attitude is probably temporary and refuse to let the responsibility disturb her. Then time, energy, and fatigue—particularly fatigue—will be under control.

In some homes better planning may be needed; in others better execution of plans. More adequate equipment or even better use or arrangement of equipment at hand may also reduce time and energy input.

Improved use of time and energy will come only as each homemaker studies her own situation and consciously develops attitudes and convictions that act as stimuli for improvement in this area. Therefore, the remainder of this section is devoted to suggested methods of controlling the time and energy input in feeding a family.

Mental Flexibility in Food Management

Mental flexibility determines ways of thinking and is thus directly connected with a person's attitudes and philosophy of life. Mental flexibility, the attitude of readiness and willingness to face possible change, helps a person to see and plan ahead, and, what is more important, to adjust and control the plan as action takes place. This saves time.

Flexibility in planning is called for in many areas of food management. Situations are constantly arising which make it necessary to change menu patterns, and homemakers must be prepared to make substitutions when the need arises. This involves knowing what foods can be satisfactorily substituted from the standpoint of nutrition and cost as well as combining well with the rest of the menu.

Sometimes flexibility is needed in adjusting the method of food preparation to lower time costs. For example, a certain homemaker who was expecting guests had made the menu for the day. Plans seemed well in hand after supplies were pur-

chased and the molded vegetable salad and cornmeal mush were made and stored in the refrigerator. The menu read:

Breakfast

Sliced oranges
Fried cornmeal mush and maple syrup
Coffee and milk

Luncheon

Tuna casserole with homemade egg noodles
Molded vegetable salad
Breadsticks
Baked apple
Tea

Dinner

Rolled rib roast
Mashed potatoes
String beans and almonds
Raw carrot and raisin salad
Hard rolls
Chocolate layer cake
(Home mixed)
Coffee

The guests arrived, but an emergency occurred which made *time* a restricted resource. The homemaker quickly adjusted her plans to reduce time requirements. The same food as originally planned was served in a different form in the following menu:

Breakfast

Orange halves
Cornmeal mush heated in warm whole milk
Toast
Coffee and milk

Luncheon

Tuna casserole with potato chips and celery soup
Molded vegetable salad
Breadsticks
Canned apple sauce
Tea

Dinner

Rolled rib roast
Baked potatoes
Buttered string beans
Carrot strips
Hard rolls
Chocolate loaf cake (mix)
Coffee

Within all homes, constant adjustments are being made as plans are being evolved or carried out. The flexible-minded and adaptable homemaker is able to reduce time and conserve energy through her ability to reshape or adjust plans as the work of the day goes forward.

Dovetailing in Food Management

Dovetailing is fitting together parts of an operation in such a way that the result will be a unified and easy-moving whole. In solving problems in homemaking, dovetailing parts of or whole operations as plans are made or work goes forward tends to reduce time and energy input and at the same time produces a smoother-running home.

Dovetailing may be used both in the *purchasing* and the *preparation* of foods. Dovetailing in purchasing means planning and buying in quantities that will be adequate for more than one or two meals. Dovetailing in preparation means getting larger quantities of certain foods ready, a portion of which will be used in one form one day and in a different form on a later day. An example is the preparation of a quantity of pastry mix in advance to be used later. Such dovetailing concentrates effort and saves time and energy. It assumes storage space of the right type to care for the prepared food. For a family of five or fewer, this procedure reduces time input and releases energy. It also gives a feeling of adequacy and forehandedness always welcome when carrying the responsibility of feeding a family.

Dovetailed meal-planning or *menu-making* can be used without sacrificing adequate variety to satisfy individual taste. A period of three days marks a favorable time for planning dovetailed meals. The possibility of too much duplication day by

day is high with a shorter period. Although a period longer than three days can be chosen, the manner of life of the average American makes the week fall rather generally into two parts, weekend and the rest of the week. For the purposes of this demonstration the three-day period Tuesday, Wednesday, and Thursday will be used.

Study the set of menus below. The numbered entries in italics indicate dovetailing through preparation. Note there are

	Tuesday	Wednesday	Thursday
BREAKFAST	(a) Fresh apricots	Orange juice	Grapefruit juice
	(1) <i>Cornmeal mush and milk</i>	(1) <i>Fried cornmeal mush and maple sirup</i>	(6) <i>Rice and dates with cream</i>
	Toast		Toast
	Coffee and milk	Coffee and milk	Coffee and milk
LUNCHEON	(b) Hot cheese sandwiches	(3) <i>Baked tuna and noodles</i>	(b) Cheese soufflé
	(c) Combination salad	(4) <i>Gelatine vegetable salad</i>	(9) <i>Potato salad with baby onions (5)</i>
	(2) <i>Fresh chocolate cake</i>	Breadsticks	(a) Fresh stewed apricots
	Tea and milk	(7) <i>Applesauce</i>	Tea and milk
DINNER	Veal cutlets	(8) <i>Rolled rib roast</i>	(8) <i>Sliced cold rib roast</i>
	(3) <i>Buttered homemade noodles</i>	(9) <i>Browned potatoes</i>	Corn on the cob
	(4) <i>New peas and baby onions (5)</i>	(d) Vinegared beets	(c) Glazed carrots
	(d) Raw beet and spinach salad	(e) Carrot and celery salad	(c) Sliced tomatoes
		(2) <i>Chocolate cake and caramel sauce</i>	(7) <i>Apple snow</i>
	(6) <i>Rice pudding</i>	Coffee	Coffee
	Coffee		

Italics are used to indicate dovetailing in preparation.

Bold-face entries show dovetailing in purchasing.

nine incidents of dual preparation. The lettered entries in bold-face type indicate dovetailing through purchase. There are five such occurrences. Now note the incidents of dual preparation which also allow dovetailed purchase. There are five such cases, or numbers (4), (5), (7), (8), and (9). The remainder of the dual preparation items arise from use of staples, such as cornmeal, flour, eggs, butter, chocolate, rice, etc. On the other

hand, note that, aside from beverages and bread, each day sees but one or two food items not dovetailed in some manner.

Dovetailing in *food preparation* and *service* may also be applied in food management. A listing of suggestions follows:

Oven, electric roaster, or steamer meals not only reduce time and energy costs but may also reduce cost of fuel.

Dovetail preparation of items for future meals while clearing up after breakfast or while cooking a luncheon dish: for example, luncheon pudding.

Dovetail preparation and service by preparing food at table—mixing salads, toasting, baking waffles, or pancakes, etc.

Dovetail food service by serving plates of food from the kitchen.

Dovetail courses by placing the dessert on the table with the other courses. The luncheon menu for Tuesday lunch and Wednesday dinner on the dovetailed meal chart would permit this type of dovetailing.

Dovetail food service by arranging meat and vegetables attractively on the same platter or chop dish. This saves time, and the change in service will be welcomed by the family.

Dovetailing for informal occasions which provides simplicity yet preserves charm might be using salad plates for both salad and bread and butter; using the dinner fork for both dinner and salad when served at the same time; using a tray for salads and serving them directly to the dinner plate.

Another potential *dovetailing practice* is *integrating operations* connected with feeding the family with other homemaking responsibilities. The more completely the homemaker is able to synchronize the various operations she is called upon to perform, the greater will be the reduction of time and energy. Dovetailing helps to make a "unified whole" of homemaking rather than a "one job, plus another job, plus another job" pattern.

The following list suggests other methods of dovetailing *different activities* in homemaking.

Dovetail food preparation and account-keeping.

Carry on food preparation and laundering operations concurrently. Dovetail kitchen work and child training in food preparation by providing a smaller production unit where the child can work along with the mother.

Dovetail food management and the training of adolescents by giving them choices of interesting foods to prepare as their way of helping, such as keeping the family cooky jar filled, or by enlisting their help in preparing food and service for a family pleasure or fun occasion.

Dovetail family hospitality by having a buffet supper for adults and a kitchen or recreation room party for the young people.

The Freezer in Food Management

With advance planning, a freezer can mean less frequent marketing. One trip can take the place of several. By buying fresh or ready-frozen foods in quantity, one can avoid emergency marketing trips in crowded stores.

A freezer can be of service to a homemaker in a number of ways:

1. Freezing and storing fresh foods.
2. Storing commercially frozen foods.
3. Freezing of foods cooked in quantity and packaged in meal-size portions.
4. Freezing of cooked and baked foods.

Thoughtful planning in these four areas of frozen food possibilities saves money, time, and effort in meal preparation.

Additional References

- Adams, Charlotte, *Housekeeping After Office Hours*, New York: Harper and Brothers, 1953.
- Bogert, Jean, *Diet and Personality*, New York: Garden City Books, 1947.
- Bogert, Jean, *Nutrition and Physical Fitness*, Philadelphia: W. B. Saunders Company, Fifth Edition, 1949.
- Budolfson, Marie, "Kitchen Controls for Family Food Costs," *The Kitchen Reporter*, published by Kelvinator Kitchen, February, 1951.
- Dickens, Dorothy, *Food Use and Gainful Employment of the Wife*, Miss. Agr. Exp. Sta. Bul. 558, 1958.
- 1957 *Dietary Levels of Households in the United States*, U. S. Dept. Agr., Household Food Consumption Survey, 1955, Rpts. 6, 7, 8, 9, 10.
- Food Consumption of Urban Families in the United States*, U. S. Dept. Agr. Information Bul., No. 132, 1954.
- Food for Fitness . . . a Daily Food Guide*, Leaflet 424, Office of Information, U. S. Dept. of Agr., 1958.

- Kinder, Faye, *Meal Management*, New York: The Macmillan Company, 1956.
- Lewis, Doris L., Gladys C. Peckham, and Helen Stone Hovey, *Family Meals and Hospitality*, New York: The Macmillan Company, Revised Edition, 1955.
- Morr, Mary, "Food Mixes and Frozen Foods," *Journal of Home Economics*, Vol. 43 (January, 1951), pp. 14-17.
- Paul, Pauline, Olive M. Batchner, Lilian Fulde, and Kay Gaffner, "Dry Mix and Frozen Baked Products," *Journal of Home Economics*, Vol. 46 (April, 1954), pp. 249-254.
- Paul, Pauline, Eva Sween, and Barbara Bittner, "Dry Mix and Frozen Baked Products," *Journal of Home Economics*, Vol. 47 (April, 1955), pp. 256-258.
- Peyton, Alice B., *Practical Nutrition*, Philadelphia: J. B. Lippincott Company, 1957.
- Sherman, Henry Clapp, *Foods: Their Values and Management*, New York: Columbia University Press, 1946.
- Sherman, Henry Clapp, and C. S. Lanford, *Essentials of Nutrition*, New York: The Macmillan Company, Third Edition, 1951.
- Sweetman, Marion Deyoe, and Ingeborg MacKellar, *Food Selection and Preparation*, New York: John Wiley and Sons, Fourth Edition, 1954. Chapters 4 and 5.
- Welinsky, H., "Changing Patterns of Family Life," *Children* (May, 1956), 163-169.
- Wilmot, Jennie S., and Margaret O. Batjer, *Food for the Family*, Philadelphia: J. B. Lippincott Company, Fourth Edition, 1955.
- Zimmerman, M. M., *The Super Market: A Revolution in Distribution*, New York: McGraw-Hill Book Company, 1955.

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- Food—The Yearbook of Agriculture* 1959, Alfred Stefferud, Editor, Washington D. C.: The U. S. Government Printing Office, 1959.
- Goldman, Mary E., *Planning and Serving Your Meals*, New York: McGraw-Hill Book Company, Inc., 1959.
- Stevenson, Gladys T., and Cora Miller, *Foods and Nutrition*, New York: John Wiley and Sons, Inc., 1960.
- Wilson, Eva D., Katherine H. Fisher, and Mary E. Fuqua, *Principles of Nutrition*, New York: John Wiley and Sons, Inc., 1959.

THE SITUATIONS AND PROBLEMS connected with clothing the family fall into the realm of both physical activity and management. When the family is started, the problems that must first be met are quite different from those involved in feeding the family. The early problems may not be those of choice or how to satisfy needs, but are more likely to be those of care and upkeep.

The choosing of new clothing may be delayed for a longer or a shorter time depending on the amount of clothing on hand at marriage. Custom dictates that the amount then be rather adequate. When the stock becomes depleted, however, or when children begin to arrive, clothing-management problems loom up and are thereafter ever-present. Clothing must be provided for motherhood and for the baby, and later for the growing children as well as for husband and wife. The period of highest expenditure for children's clothing comes during the later school years, when the children are in the teens and twenties and before they become self-supporting. The demand is for school, work, play and special-occasion clothes. In these years the clothing expenditures of husband and wife decrease. In the later period of family life the clothing needs of husband and wife further decrease and clothing expenditures are not likely again to mount.

The objective of clothing management is to further the physical, social, and psychological well-being of each member of the family in each stage of the family's life, and to do this with

a reasonable expenditure of the family's resources, both human and material.

Management Responsibilities in Clothing a Family

The managerial responsibilities concerned with clothing the family permeate all aspects of family life. They include:

1. Developing in the minds of children and young people intelligent attitudes regarding standards for clothing, such as suitability, quality of fabric, and adequacy without excess.

2. Analyzing family clothing needs.

3. Deciding on the amount of money the family can afford to use for clothing.

4. Making plans for the best way to meet the wardrobe needs with the money available—whether to use ready-to-wear or homemade clothing, or a combination of the two. Such plans might well cover a year or two or three.

5. Choosing the market where the best values can be obtained.

6. Selecting and buying the clothes in the market.

7. Training the children in choice-making—in selecting from the wardrobe the garment that is best suited to the occasion.

8. Planning for the care and upkeep of clothing, and training the children in this phase of clothing management.

9. Planning for the storage of clothing, and teaching the children acceptable standards of clothing storage.

10. Teaching teen-agers to plan for their clothing expenditures in light of the needs of the entire family.

11. Planning for and providing space for clothing construction if this is done at home.

12. Choosing and taking care of the equipment used in the care and construction of clothing.

The above responsibilities, it will be noted, range from the practical, educational, and psychological to the more technical phases of clothing management. They require the use of all the different resources available to the homemaker—time and energy, money, attitudes, knowledge, and skills—which will be elaborated later. The constant making of decisions concerning the use of these different resources—when to use one in place of another—is an important part of clothing management. If, for example,

a member of the family is skilled in clothing construction and knows fabrics and styles, these talents can be used to make some garments at home and thus save money for other needs or desires. Knowledge of good values to be had in certain markets will save time and energy often expended in shopping around and may save money, as will also knowledge of the kind of sales a given store habitually puts on and which sales make for real dollar savings.

Family Resources Affecting Clothing Management

The family's response to clothing management is immediate, since clothing is of daily and direct concern to each member of the family. To help solve the clothing-management problems every family resource is needed, even the *community facilities and services*, such as transportation, light, and sanitation.

An important resource in clothing the family is the *attitude* developed by members of the family toward clothing and clothing problems. One of the early phrases a child says is "my shoes" or "my cap." Thus, clothing is early recognized as a personal possession, and on this feeling of possession the homemaker can early begin to build in family members a fine structure of thinking and acting. From this feeling can be developed the desire of each individual to care for his or her personal clothing, pride in hanging it up, and willingness to do those things that will keep it in good condition. Two other attitudes that will mean much to the individual's and the family's happiness are willingness to be fair to other members of the family in demands for new clothing and to wear appropriate clothing for varying occasions.

The *abilities* of the family members are rich resources in solving clothing management problems. One member may have a flair for choosing suitable garments for others as well as for her- or himself. Another may have a latent or apparent gift for judging materials and the use of color, or for organizing a wardrobe or scheduling clothing replacements. Artistic and manual abilities could find expression in carving wooden buttons or other accessories, making costume jewelry, or crocheting jaunty

hats. Developing and using these abilities can aid materially in the solution of clothing-management problems and in conserving the resource money when it is limited.

In considering the resource *knowledge*, the homemaker might make a check list of information needed about clothing and clothing management. In earlier days homemakers were familiar with the types of materials available and their performance. Materials for clothes were usually bought and made into garments at home. Fabrics were known, and in families of moderate income the garments were worn until they had to be discarded. The situation today is so complex, with the multiplicity of new fabrics, the weaves and knits, and the "do's" and "don'ts" in handling materials, that many problems arise in choice-making. New knowledge is often soon out of date with the appearance of even newer materials. However, the more knowledge a homemaker has and the more she keeps the information up-to-date, the more adequate she will feel when the family's clothing problems come up for solution. For instance, does the homemaker or her daughter know:

The kinds of textile fabrics now manufactured.

How to care for these fabrics.

Quality and specifications in buying.

Meaning of label terms such as Sanforized, all-shrunk or super-shrunk, 100 percent virgin wool, guaranteed all wool, etc.

Relation of price to quality of material.

Relation of price to quality of construction.

Where to look for points of good construction.

Significance of faulty construction to amount of wear.

How to be independent yet follow fashion changes.

What constitutes art and style in dress.

How to build up and maintain an adequate wardrobe.

Market conditions at various times of the year.

Merchandising procedures in local stores.

Relation of trade-name goods to quality.

Where hard-to-get sizes and trade-name garments that have given good service may be bought.

Where lines and styles for the special builds of family members may be bought.

What colors are most suitable and becoming for the particular coloring of family members.

When to mend, make over, or discard.¹

The many activities connected with clothing management require *energy* and *time* on the part of all members of the family. Planning for needs, buying, constructing, washing, ironing, picking up, hanging up, mending, and storing require both of these resources. It takes time, energy, attitude, and knowledge to teach young people the care of clothing. It requires time to choose or help others to choose what they will wear from day to day. Chapters 6 and 7 discuss time and energy and how planning affects their use in all of the homemaker's activities, including many involved in clothing management.

Underlying the use of all other resources and limiting or extending their range of use is the resource *money*. Whether the amount of money is small or large, given the need for certain commodities for the family, men and women homemakers will use their other resources—attitudes, knowledge, time, and energy—to extend the resource money in order to fill their clothing needs. The careful use of money, no matter what amount is available, gives satisfaction when clothing for the family is being planned.

Families have the above-mentioned resources in varying amounts, but in all families the supply of one or more is limited. Every family must therefore solve its clothing-management problems according to the resources it has. A family, for instance, may have a limited amount of money but have knowledge and abilities that can be called on to take the place of money. The use of abilities in selecting materials and constructing garments requires the expenditure of time and energy. If the supply of money is so restricted that members of the family are using their time and energy to add to money income, then, to meet this need for clothing, real services may need to be increased. A balancing of values in the use of all three resources—money, time, and energy—is necessary before a wise solution to such a problem can be worked out. If, on the other hand, though money is

¹ Irma H. Gross and Evelyn A. Zwemer, *Management in Michigan Homes*, Mich. Agr. Exp. Sta. Tech. Bul. 196, 1944.

restricted, time and energy are abundant, the deliberate development of abilities may prove to be the wise way to meet the clothing needs. It is of interest to note that many women report expenditures for yard goods, findings, and sewing help in making family garments in the home.

If money is not limited but knowledge in the clothing field is, the homemaker may turn to someone who has that knowledge and let that person make the decision. A dressmaker or modiste, with or without a store connection, could give this service. One with a store connection might not make a service charge, although a dressmaker is likely to do so. A well-qualified buyer or salesperson who knows her stock well and the homemaker's needs can give valuable help. The purchaser should have her needs carefully thought out and her top price set before she engages help in her problem, or these services may prove costly.

The homemaker and her family who would solve the clothing problems satisfactorily will need to survey the family resources available to see which ones, other than money, affect the solving of these problems. If she can develop a more adequate supply of these resources among the members of the family, she can conserve the money supply for other uses. Some members of the family with certain interests and capabilities might enjoy making their own clothes as a hobby or for recreation. Another member might see in an old garment possibilities for a different type of dress, skirt, or blouse for someone in the family who is smaller and make that her contribution to the family coffer. Incidentally, any such project, or even the attempt, is a valuable learning experience in the field of clothing and shows how attitude, time, and energy can be used alternatively for money. Practically all families are called upon to make these substitutions in order to maintain and improve family standards of living.

Human Relationships in Clothing the Family

Providing the clothing for each member of the family through the various stages of the family's life cycle presents many problems in human relationships.

Clothing the family is, in fact, a group problem with an in-

dividual approach and thus gives rise to management problems that influence human relationships in the home. By contrast, feeding the family is largely an individual problem with a group approach, since in solving food-management problems the effect on the growth and health of the person is of first importance and the psychological effects are secondary. After certain fundamental principles of sanitation, physical fit of the garment, and protection are assured, clothing management is primarily a psychological problem because the choice of clothing markedly affects the development and happiness of people. An individual can eat his meal in the privacy of his own home. No outsider need know what he has eaten, how much, or under what conditions he has eaten. Not so in clothing, for as soon as a person steps outside his door he is in immediate contact with his fellow men, receiving their appraisal. The impact of the social group is extremely important in personality development, for it conditions behavior. The clothing one wears plays an important part in one's adjustment to the social group.²

Recognition of Individual Differences and Needs

Clothing needs of family members vary because of individual differences. People are not alike in looks, physique, or temperament, and they are equally different in clothing needs. We have no norms, or standards, for choice of clothing comparable to nutritive standards for food. Thus individual differences play a greater role in clothing management than in most items of choice in family planning. That is to say, style and fashion enter into choice in large measure, since an individual does not like to be too different from his or her group. The family problem, however, in clothing management is the need to adapt current style to individual differences and stay within a given money allowance. Too close adherence to fashion, however, increases time and money costs.

The two problems, developing attitudes about clothing and analyzing individual needs, are inseparable. The way the solu-

² Mildred Graves Ryan and Velma Phillips, *Clothes for You*, New York: Appleton-Century-Crofts, 1954, Chapters 1 and 10.

tion of either can reflect upon the development of the individual is well illustrated by the example of Joanne.

Joanne was a flaxen-haired, blue-eyed girl, slightly oversize, with a mother who had impeccable taste in dress. The income of this family had been greatly reduced. Joanne was charming in rather tailored sailor dresses or sweaters and skirts, with her hair in braids around her head. In this costuming she fulfilled her mother's idea of appropriate dress for a child of 13 or 14 years in junior high school. Because no one in her class at junior high wore hair in this style, difficulties arose. She wanted a pony tail so that she would look like all her junior high school friends. To the onlooker, the mother's standard of dress and hair arrangement showed taste and charm. The girl, however, resented the stand her mother took. She became weepy, self-pitying, irritable, and at times unpleasant with her family and friends. The mother realized that she would have to do something to help Joanne see that in the long run she would want to be individual. The mother began by showing her how to be analytical about her dress. At first this made Joanne defensive, and with such an attitude she lost much of her charm. The mother, realizing this, decided to let her take more responsibility for her clothing. She let her choose and make some of her own clothes instead of buying all of them readymade. With the mother's tactful guidance in analyzing her needs and pointing out the social effect of appropriate and individual styles, Joanne began to choose and enjoy suitable clothing and in so doing convinced her mother that a different hair style was suitable for her. Her normal genial response to people returned and she was herself again.

If this mother had not been open-minded and had not seen the two associated problems of attitudes about dress and personal needs and had not worked them out with the cooperation of her daughter, the results might have been distorted development for Joanne and unpleasantness for the family.

Among the individual differences which affect choice of clothing for family members and thereby bring about management problems, physique probably comes first. This should be under-

stood by mothers since it creates special situations in family living. Physique influences the role one plays in a group, is important in personality development, and together with personality is largely responsible for type differences in individuals. In fact, the theory of "yang" and "yin"³ in costume designing is based upon type differences in temperament, facial expression, coloring, posture, and forcefulness or fragileness.

The study made by the Bureau of Home Economics on measurement of children,⁴ which shows that a great many children of like age have entirely different body proportions and dimensions, should indicate to parents that irregularities are to be expected, understood, and planned for rather than regretted. Personality and relationship problems often arise from parents expressing regret because of the size or type of one of their children.

Parents cannot overlook the importance of their responsibility to study and to understand the feelings of their children who are off the norm in body form. Such knowledge will aid them in helping their children to understand themselves and the reasons for any adjustments in relation to dress. This understanding will prevent the warping of a child's personality during developmental years. Fortunate is the child whose parents understand causes of irregularities, take them for granted, obtain medical aid for the condition when that is necessary, and through wise choice of clothing help the child to feel no different from others.

Understanding each child in his various phases of development is an important step in the satisfactory solution of many clothing-management problems.

Training Children in Clothing Management

Another major clothing-management activity which affects human relationships and development is training children to choose their own clothing, to determine their personal needs, and to understand their needs in relation to other family needs. Clothing selection should be started early, children being en-

³ Bell Northrup, *Art Education Today*, Teachers College Publication, Columbia University, New York City, 1936.

⁴ Ruth O'Brien and Meyer A. Girshick, *Children's Body Measurements for Size of Garments and Patterns*, Bureau of Home Economics, U. S. Dept. Agr. Misc. Pub. 365, 1939.

couraged and trained to make actual choices of clothing in the market.

Mothers can help their children develop good judgment in clothing selection by giving them the following experiences.

Among the several garments a child already owns, allow him the privilege of choosing the ones he wishes to wear on special occasions.

Allow the child to make the choice in his or her own environment (home) between two new equally acceptable garments, such as dresses or suits.

Still in his home environment allow a choice between two unlike articles either of which is acceptable, such as a new hat or new shoes.

Take the child to the store to help choose between one of two like garments. The responsibility is still on the parent's shoulders.

Take the child to the store and allow the child to assume the responsibility of choosing one of two like garments.

Take the child to the store and help him to choose between two unlike items.

Allow the young members of the family to participate in planning the family clothing needs for the year.

Allow each young member to set up his or her own clothing needs and select independently within the family's clothing budget.

Encourage independent action, with parent as consultant only, by arranging for the young person to pay for the clothing from his independent allowance.

Group Problems in Clothing the Family

Although clothing management is primarily a problem with an individual approach, it cannot be separated from group consideration since the purchase of clothing is made from the family treasury or income.

The philosophy of family living and the quality of group relationships are revealed quickly as the members of the group make their clothing demands. If the family has developed a habit of sharing in the use of income, in activities, and in receiving pleasure from interests of other members, the group considerations in clothing the family will be an integral part of the good spirit of the family. If it has not developed this habit, then the decisions incident to determining needs, to choosing the market or goods, and to having the young people act independ-

ently in clothing themselves are likely to create group dissatisfaction. Essentially the quality of the relationships in family living influences the extent of selfishness or amount of unfairness present in the individual members. These relationships have marked effect on the solution of the clothing-management problems.

Group Considerations

Some of the group considerations and conditions which are important in solving family clothing-management problems are:

Individual and group understanding that shared income is used to fulfill individual clothing desires.

Group understanding of individual desires and needs such that essential occupational or activity needs are cared for.

Group discussion and decisions on major purchases for a given period—a season or a year—to make possible the purchases of major articles such as coats or suits in alternate seasons or years.

Group decisions about amount of total income to be allocated to clothing in view of all family needs.

Development of group attitudes about controlling money cost of clothing through skillful buying or excellence of personal care.

Development of favorable attitudes toward the satisfactions that can come through creativeness in solving clothing-management problems.

Development of technical abilities in young people for making and caring for an adequate wardrobe. Acquiring this ability adds satisfaction to all members of the group.

Development of favorable attitudes about using shared equipment in the care and construction of clothing.

Development of personal standards in sharing in group storage of clothing, especially when space is limited or inadequate.

Money Cost of Clothing the Family

The money cost of clothing a family includes both the amounts paid for the various items of apparel bought for each member and the amounts paid for upkeep—cleaning, repairing, remodeling, etc. As stated earlier, custom dictates that a young woman start her marriage with something of a wardrobe, large or small.

TABLE 20. ANNUAL CLOTHING BUDGET FOR SALARIED AND WAGE-EARNER FAMILIES *

	Salaried Worker			Wage Earner (Home Renter or Home Buyer)		
	Re- place- ment	Up- keep	Total Annual Cost	Re- place- ment	Up- keep	Total Annual Cost
Man	\$190.17	\$36.11	\$226.28	\$108.34	\$16.56	\$124.90
Woman	207.01	25.81	232.82	125.70	13.70	139.40
Boy of 13	121.67	9.34	131.01	103.67	8.92	112.59
Girl of 8	107.11	6.41	113.52	91.94	6.20	98.14
Total	\$625.96	\$77.67	\$703.63	\$429.65	\$45.38	\$475.03

* *Quantity and Cost Budgets for Two Income Levels*, The Heller Committee for Research in Social Economics, University of California, Berkeley. Prices for the San Francisco Bay Area, September, 1957 (including sales tax), pp. 36-40; 73-76.

However, with the ease with which readymade clothing can now be obtained and the continuing development of new and synthetic fabrics, the tradition of a large and sumptuous trousseau has been largely replaced by the practice of selecting a conservative and functional wardrobe.

The homemaker's problem in controlling the cost of clothing the family is one of thinking ahead and intelligently planning with the family the wardrobes of the various members over a period of two or three years, including the planning of replacements, remaking, and augmentation. Where children are of the same sex and not too far apart in age, such planning frequently calls for the less-perishable garments, such as coats or jackets, to be used by two or more children in succession.

The cost of the replacement and upkeep of clothing in wage-earner and salaried families in the San Francisco area are shown in Table 20. Costs are given not only according to income level, but are also given separately for the man, the wife, and two children. Three facts indicated here are worth noting. First, and obviously, as the income increases the amount spent for clothing increases. Second, the wife's clothing usually costs more

than the husband's. And third, the cost of upkeep is greater for the man's clothing than for the woman's or the children's.

Among all family expenditures the cost of clothing, until very recently, ranked third, coming after food and shelter. But in the most recent data (Table 46 of Appendix, page 509) the automobile has pushed up to third place, crowding clothing from this position, and the expenditures for clothing have dropped from a level of 10 to 12 percent of all expenditures to 7 to 9 percent.

Technical Problems in Clothing the Family

Knowledge of Fabrics and Construction

The clothing needs of the family and the resources available for filling the needs having been determined, the actual selection of the articles in the market requires careful consideration and planning. At this point a consumer meets with difficulties. Contradictory statements in advertising baffle her, new materials are constantly coming into the market, and new finishes are given to old fabrics. These and many similar factors make identifying materials and determining quality difficult.

Whether the homemaker buys or directs the purchase of clothing, the diversity of articles needed by the modern family is so great that one person cannot know all the facts concerning the quality of all materials.⁵ Yet if full value is to be received from the dollars spent for clothing, some knowledge of the quality of fabrics and the construction of garments is necessary.

The problem can be solved in three ways. One way is to attempt to keep informed about new materials as they enter the market, in order to know what materials are available for choice. For many homemakers this is impossible since there is not enough time to become well informed on all goods that must be bought. Another is to buy the products of processors and manufacturers who label their goods, who tell the purchaser how to care for them and stand back of their labels and guarantees. A similar safeguard is to buy from stores that test their merchandise in their own laboratories and tell the purchaser just what he is

⁵ *Money Management—Your Clothing Dollar*, Household Finance Corporation, Chicago, 1959.

paying for. The third way is to take an interest in and participate actively in any movement that aims to help consumers make more intelligent choices of materials. This every homemaker can do. Such movements may have as their purpose better-informed salespeople, better and more informative labeling of fabrics and garments, or more authentic advertising. Not until consumers see the need for more informative labeling and actively demand it will methods of merchandising include reliable labels. This information should be in standardized vocabulary to be generally informative. It should give type of fiber used in the fabric, the probable shrinkage, the colorfastness to various causes of fading, resistance to wrinkling, working conditions under which the item was produced, and best type of care for the fabric. Some progress is being made in this direction.

Shall We Sew?

The answer to this question lies in the capabilities of family members, in the interests of the mother and daughters and in the time they can use for this activity; also in the availability of adequate equipment and space.

Learning to sew well requires motivation and willingness to develop adequate techniques. If enough money can be saved by home sewing to help in meeting other needs or desires, and it usually can be, motivation probably will not be a problem. If this cannot be done, little sewing is likely to be done at home except by those who feel that they can get more nearly what they want, either in style or fabric or color, by making it than by searching readymade departments for it.

A drawback to many homemade garments is that unless the person making them has developed skill in choosing designs and in construction processes, they are likely to look amateurish when contrasted with the style of good-looking readymade garments. Modern patterns, however, with their illustrations of the garment to be made and their detailed directions are a great help in overcoming this handicap. With time-saving short-cuts and proven techniques in construction developed by the home economics extension services, college classes, and other agencies, the use of modern electric equipment, and the fact that many

houses are planned to include a sewing cabinet or closet, uncertainty in the end results has been substantially reduced and sewing at home has become a less time-consuming and a more creative activity than it was at one time.

The literature now available on selecting clothing designs, on wardrobe planning, and on helps in buying (see references at end of this chapter) has done much to revive an interest in home sewing. Also the realization that the time and energy used in clothing construction have monetary value, since the money saved can be used for other needs and desires, has stimulated a revival of interest in this activity. Designing and making her own dresses, blouses, and suits can be a creative experience of real value to the teen-ager if the mother can give her some guidance and encouragement, or if she can obtain help through 4-H club connections, high-school sewing classes, or otherwise. With the amount of free time predicted to be released by future industrial practices, the development of this form of creativity might well be considered for the daughters in the family.

As to undergarments, modern styles and fabrics used in them, together with the relative inexpensiveness of these garments and the ease of their care, make home construction both unnecessary and usually impracticable.

Management in the Selection and Care of Clothing

One of the first steps in successfully managing the care of clothing is to use good judgment in its selection, especially if clothing suitable for many uses is under consideration. Building such a wardrobe calls for long-range planning and conscientious adherence to the plan. The purpose of such a plan is to provide clothing that is suitable for all occasions, serviceable, satisfying from the esthetic standpoint, and of a kind to win group approval. On a limited income the wardrobe will of necessity be small, each garment of the best quality and material the budget will allow, "appropriate, functional and individual," according to Morton.⁶ After the plan is decided on, whether by the family

⁶ Grace Margaret Morton, *The Arts of Costume and Personal Appearance*, revised by Carolyn Ruby, Bess Steele, and Mary E. Guthrie, New York: John Wiley and Sons, 1955, pp. 335-345.

in consultation or by the individual, the garments on hand should be inventoried, and any items that can be used as they are or altered to fit the plan should be listed.

An example of a useful item in a small wardrobe, that shows the planning of resources to meet needs, would be a three-piece suit, with blouses, sweaters, scarves, and hats to be used in various combinations. A dark color would be the sensible choice, especially for an all-occasion ensemble. A basic or multi-purpose wool or crepe dress in harmonizing color would be a useful adjunct for afternoon occasions. Similarly, a dual-purpose dress made of a year-round type of material and with a jacket could be used for all evening occasions. In general, hats, shoes, gloves, and bags match the basic costume color. Building a wardrobe of this type could be staggered over several seasons.

The cost of the care of certain fabrics and colors is an important consideration in choosing clothing for the family. This cost may be in *money* or in *time* and *energy*. The relative supply of these three resources available to the family will usually determine the choice between two garments. The equipment required in the care of the garment and the availability of commercial services may also influence the choice.

The garment or the wardrobe having been bought, the length of its life will depend upon the way it is cared for. *Care of a garment means the way it is used, the repair given it, and the cleaning and storage provided for it during its use.* The management involved in these technical phases of clothing care are: first, the development of attitudes about care; next learning how to care for clothing; and finally, the development of habits of care that will conserve and extend the life of garments.

Planning for and providing appropriate storage for out-of-season garments, such as wintercoats and other woolens stored during the summer, or summer clothing stored during the winter, are other management responsibilities connected with clothing care. Deciding on the best time to store these materials and planning ahead in order to have on hand proper supplies for storage, such as materials for protecting woolens, paper, string, and boxes or cartons, are involved in this phase of clothing care.

Adequate storage space for clothing has been discussed under

planning for housing. The way the storage space is used, however, is a management consideration.

In a well-organized clothes closet, where there is a place for everything, each article is more likely to be put in its place. This saves time for a busy person, improves the condition of the article, lengthens its service, and thus reduces costs both in terms of money and in time and energy. Where a closet is shared by two or more members of the family, a considerable amount of planning is necessary if the space is to be used equitably and all users are to be satisfied.

Additional References

- Bishop, Edna Bryte, and Marjorie Stotler Arch, *The Bishop Method of Clothing Construction*, Philadelphia: J. B. Lippincott Company, 1959.
- Brew, Margaret L., "Development of Clothing Budgets," *Journal of Home Economics*, Vol. 46 (October, 1954), pp. 578-582.
- Brew, Margaret L., Roxanne R. O'Leary, and Lucille C. Dean, *Family Clothing Inventories and Purchases*, Washington, D. C., U. S. Department of Agriculture, Information Bulletin 148.
- Danville, Bea, *Dress Well on One Dollar a Day*, New York: William Funk, 1956.
- Erwin, Magel Deane, *Clothing for Moderns*, New York: The Macmillan Company, Revised Edition, 1957, Chapters 3, 4, 5, and 9.
- Lewis, Dora S., Mabel Goode Bowers, and Marietta Kettunen, *Clothing Construction and Wardrobe Planning*, New York: The Macmillan Company, 1955.
- Man-Made Textile Encyclopedia*, J. J. Press, Editor, New York: Textile Book Publishers, Inc., 1959.
- Ryan, Mildred Graves, *Dress Smartly—A 100-Point Guide*, New York: Scribner, 1956.
- Scott, Clarice L., "Clothing Needs of Physically Handicapped Homemakers," *Journal of Home Economics*, Vol. 51 (October, 1959), 709-713.
- Troelstrup, Arch W., *Consumer Problems and Personal Finance*, New York: McGraw-Hill Book Company, Second Edition, 1957, Chapters 8 and 9.
- Van Syckle, Calla, *Consumer Practices in Buying "Large-Expenditure" Items of Clothing, Furniture, and Equipment*, Mich. Agr. Exp. Sta. Tech. Bul. 224, 1951.

21

Family Health and Recreation Management

THE FIRST STATEMENT in the constitution of the World Health Organization is a definition of health, agreed to officially by 64 nations: "Health is a state of complete physical, mental, and social well-being, not merely the absence of disease or infirmity." As to the means of achieving good health, President Eisenhower, in a message to Congress in 1954, declared that it should be accessible to all, and that "a person's location, occupation, age, race, creed, or financial status should not bar him from this access."¹ Chisholm² points out that neither physical health nor individual mental health—the ability of a person to get along with the people immediately around him—is any longer sufficient, but that "social health, on a world scale, is absolutely essential in the individual if the human race is to survive."

Thus our nation and the other nations of the world, as well as our communities, are aware that health is of vital concern to all.

Williams,³ in speaking of health, emphasizes its positive aspect, calling it a tool to efficiency and happiness. Since body and mind are both aspects of all human beings, they should be in good

¹ Dwight D. Eisenhower, Message to Congress, January 18, 1954.

² Dr. Brock Chisholm, from an address given before the Ohio Radio Institute, Columbus, Ohio, May 2, 1948.

³ Jennie Williams, *Family Health*, Philadelphia: J. B. Lippincott Company, 1945, pp. 3-8.

balance and in vigorous health. The condition of one affects the others. Physical debilities have an adverse influence on the mind and spirit. Emotions out of balance affect adversely the body. When all are in optimum health, life becomes effective and is more apt to be happy.

A homemaker's responsibility for the health of her family consists of doing whatever is possible to prevent and cure ill health and to provide healthful conditions under which the family will live, work, and play. In all stages of the family life cycle the desire for a wide variety of goods and services is constantly in competition with the equally urgent, but too often neglected, conditions of family health. All resources—knowledge, attitude, energy, time, and money—are required in order to provide abundant health for the individual family and for all families throughout our country and the world.

A family that has good health as a goal, and that works to build optimal health in all its members, usually sends out into the community and the world persons who are effective and adequate. A family that shares recreational activities and has fun together, and in which all the members enjoy each other, is more likely to send out persons who are mentally healthy and well adjusted to life than are families that do not have this kind of atmosphere. Physical, mental, and social health is a human value to be constantly fostered in the family.

This chapter will treat first the problems connected with health management; and second, with the value of recreation in building family unity, happiness, and mental and social health.

Public Agencies Help in Health Management

The homemaker's responsibilities for the health management of her family are materially aided by the services rendered by many public agencies, local, state, and national. The schools, for instance, take over much of the teaching of health habits and practices which the homemaker begins in the home when the children are small. This teaching is being extended and stressed in both elementary and high schools. Indeed, some educators and members of the medical profession recommend, as an in-

centive for better health, that schools give credit to students for progress in health as well as in reading and arithmetic.

The modern community, with its sanitary codes and inspection of foods and public eating places as well as school buildings and grounds, by its control of garbage collection and disposal, and by its insect and rodent control, constantly guards the health of its people. There are also a number of community health services available to individual families. Immunization against communicable children's diseases, diagnosis for such diseases as tuberculosis and some forms of cancer, treatment for poliomyelitis are examples of free community health services.

A health measure, however, for which the homemaker is almost entirely responsible is adequate nutrition. (See pages 451, 452.)

A National Health Program

An excellent start toward the improvement of national health was made at a meeting of the National Health Assembly in May, 1948. With the approval of President Truman, the Federal Security Administrator called together 800 national leaders "from every walk of life and from all parts of the country—representatives of consumers, the professions, voluntary and professional associations, organized health services, hospitals, professional schools, university and research groups."⁴ The result of this meeting was a ten-year health program which stressed health education, medical care, and preventive medicine, citing as one goal that every individual, without regard to his economic status, should have full access to adequate medical services for the prevention of illness, the care and relief of sickness, and the promotion of a high level of physical health.⁵

We are still working toward the above goal, as reaffirmed by President Eisenhower in his message already cited. When more has been achieved, homemakers will have greatly increased assistance in their work for family health. The first responsibility, however, will always remain with the individual homemaker,

⁴ Oscar R. Ewing, *The Nation's Health*, Report to the President, Washington, D. C., 1948, p. 1.

⁵ *Ibid.*, p. 63.

who must always be aware of the health needs of her family and work constantly to take care of them.

Planning Preventive Measures

One of man's problems since the dawn of history has been the prevention of disease. We no longer wear fetishes and make sacrifices to inimical gods to ward off illness. Today homemakers can take specific measures to prevent both minor and fatal illnesses in members of their families; and they can have confidence that their efforts will meet largely with success.

Medical Care for Mothers and Infants

Medical science in recent years has extended the life expectancy of infants born since 1920 by more than 20 years. In some areas where intensive effort has been made, it has reduced infant mortality to three or four deaths per 10,000 births.⁶ Recent data show a great increase in the number of children in rural areas born in hospitals. This type of care has helped lower the infant mortality rates, which have been higher for rural than for urban areas.

The importance of planning for the health and care of the mother during pregnancy cannot be too strongly emphasized. Contact with a physician, a public health nurse, or a prenatal baby clinic should be made early to ensure adequate maternal care. More general hospitalization for maternity cases as more federal funds become available under the Hospital Construction Act passed in 1946, and as more rural and city families avail themselves of prepaid hospital insurance should reduce maternal deaths.

The second objective of the Ten-Year Program was planned to go beyond the provisions of the above act to the point of "assuring enough hospital beds for the people's needs, improving the quality of service in hospitals, building health and community centers, especially in rural areas, and uniting in a regional chain, hospitals and centers."⁷ To date, considerable progress has been

⁶ Frederick D. Mott and Milton I. Roemer, *Rural Health and Medical Care*, New York: McGraw-Hill Book Company, 1948.

⁷ Ewing, *op. cit.*, p. 53.

BETTER HOSPITAL INTEGRATION MEANS BETTER HEALTH

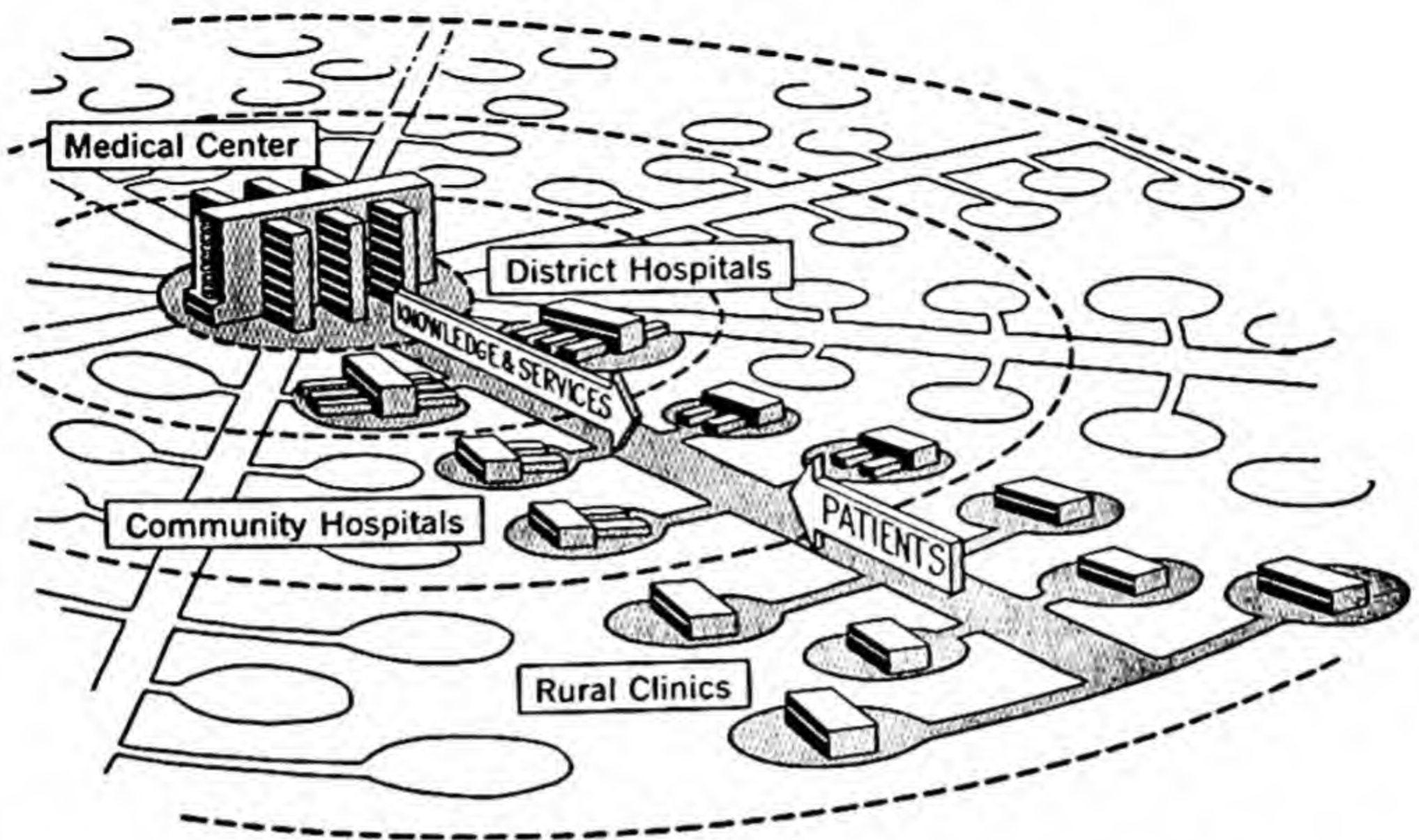


Figure 44. A coordinated hospital system, through a free-flowing exchange of medical services and patients, would offer the highest quality medical care to all communities, even the most remote. The *medical center* would combine training, extensive research, expert diagnosis, and treatment of complicated cases. Several *district hospitals* would provide such general and special services for most hospital-ized patients as major surgery, pediatrics, obstetrics, and psychiatry. *Community hospitals* would offer more limited services, referring more complicated cases upward. *Rural clinics* would serve chiefly as out-patient clinics and diagnostic centers for referral to the larger hospitals. (Oscar R. Ewing, *The Nation's Health*, Report to the President, Washington, D. C., 1948, p. 175.)

made toward increasing the number of beds available, but service has been slow to improve because of an inadequate number of nurses and the substantial increase in labor and operating costs.

Immunization and Dental Care for Children

Communicable diseases of childhood have been greatly reduced by immunization, quarantine, and sanitation. Today their incidence is at the bottom of the list of all diseases, on a percentage basis. The recent sharp reduction in the number of poliomyelitis cases by the use of the Salk vaccine is spectacular

evidence of the preventive value of immunization. Certainly, immunization of children against the numerous childhood diseases should continue.

Regular dental care is also a service that should be provided for children. "The average child on beginning school has six teeth that already have begun to decay. . . . Careful studies of large groups of children indicate that the use of sodium fluoride applications to their teeth could cut the rate of tooth decay by as much as 40 percent."⁸ Some communities have elected to have sodium fluoride added to the water supply as a preventive measure.

The close relation between good nutrition and dental health, and between dental health and total health, indicates the need for a greater watchfulness by homemakers in detecting difficulties with their children's teeth.

Early Diagnosis of Disease

Adults cannot afford to postpone caring for their own health needs. Statistics show that thousands of persons die every year of diseases that doctors could have cured or alleviated had the patient come for earlier diagnosis and help. Timely decision to seek medical help can often save considerable money as well as suffering and valuable lives.

Heart disease, cancer, and cardiovascular diseases are more prevalent in the third and fourth stages of family life than earlier. They still top all diseases in percentage incidence in spite of the vast amount of research devoted to discovering their cause and cure. There are seven National Institutes of Health in the Public Health Service doing extensive research into the causes and nature of cancer, heart disease, arthritis, metabolic diseases, blindness, and neurobiology, besides the vast amount done by universities, private companies, medical organizations, and scientists working independently. Dewhurst lists the vital health problems of the nation as malnutrition, overweight, inadequate housing and sanitation, high accident rates, especially in the home and among children, increase in long-term illness among

⁸ *Ibid.*, p. 156.

the aging population, and also the high rate of mental illness.⁹

The homemaker today should realize that examination by a qualified physician, one who uses laboratories and modern equipment to get his information, will yield incontrovertible facts about the physical condition of the members of her family that cannot be shrugged off. The periodical checkup means more than in former days, when the patient stuck out his tongue, was thumped on the chest, and dismissed. Families accept the recommendation that an infant be taken to the pediatrician for regular checkups over a specific period of time. As the child grows older, these examinations, on consultation with the doctor, can be made at longer intervals. They should not, however, be allowed to lapse entirely. Examinations should also be scheduled and budgeted for the adults in the family as a regular procedure. In a study of 382 Michigan families Gross found that 15.4 percent of the adults and 22.9 percent of the children had yearly physical examinations. The figures for regular dental care were 40 percent for adults and 56.3 percent for children.¹⁰

The conditions revealed by an examination may be due only to a temporary deficiency that can be corrected promptly if attention is given to it. In most cases of family health it is the homemaker who must see that the doctor's directions are carefully and consistently followed. The homemaker living in or near an urban center will find her health-management problems more easily solved than will the dweller on farms or in isolated communities.

Some authorities, looking ahead, believe there is prospect that in time medical research may provide an antibiotic for every infectious condition, including the viral diseases. Another promising outlook is for the cure of certain types of mental and nervous illnesses through medication. Since about half the available hospital beds in the United States are devoted to the care of mental cases—there were about 700,000 such cases in 1950—reports of prospective cures are encouraging.

⁹ J. Frederick Dewhurst and associates, *America's Needs and Resources*, New York: Twentieth Century Fund, 1955, p. 337.

¹⁰ Irma H. Gross and Evelyn A. Zwemer, *Management in Michigan Homes*, Mich. Agr. Exp. Sta. Tech. Bul. 196, 1944, pp. 65-66.

Recognizing Symptoms of Illness

In caring for the health of the family, certain awarenesses on the part of the homemaker have always enabled her to detect oncoming physical illnesses by minor symptoms. One of her resources in coping with an illness is knowledge of the type of help to call upon and where that help is available.

For the homemaker today the term *illness* has more meanings than formerly. It goes beyond the realm of physical disability and includes emotional disturbances and mental illness as well. The extremes of mental illness were formerly called insanity and were often thought to be hereditary and incurable. It is now known that they are not necessarily either. They carry no stigma for the family among whom they occur. In many cases the condition is temporary and if diagnosed early is curable through medicine or psychiatry or both.

Today delinquency and unsocial behavior are recognized as often associated with mental and emotional disturbances caused by lack of understanding and feelings of insecurity. Homemakers with growing families would do well to know something of the types of behavior to be expected at the various age levels of their children and during periods of endocrine changes at all ages. Developing an understanding and objective point of view as the problems arise tends to keep the family atmosphere warm and calm.

To detect mental illness or minor symptoms of behavior problems requires a special type of awareness; and their cure, in some cases, may require special help. The resourceful homemaker will get acquainted with the agencies in her community that are available for help and will know which ones have trained and skillful personnel equipped to handle such illnesses or to advise on procedures. She may have to go far to get the right help, for we are far short of the psychiatrists, psychiatric clinics, and child-guidance clinics that we need in our communities.

Prevention of Mental Illness

Prevention of mental illness is one of the responsibilities of mothers and fathers since they function as teachers of their chil-

dren. They can often prevent the development of unpleasant ways of thinking and feeling in members of their family that lead on to mental illness. It is much more difficult to re-educate the mentally ill person than to prevent his illness in the first place. It means changing handicapping ways of feeling and thinking to wholesome ways. The family that creates an even, warm climate of affection, understanding, and security develops wholesome social reactions and good mental health. Members of the family learn the feeling of belonging, of being adequate and successful in the conduct of their affairs. They acquire internal direction to work out a normal life.

Parents, as teachers, need both to guide and to direct their children's behavior. They also need to remember that the tone of voice, the smile or scowl, the tenseness or ease, the attitude of rejecting or of still holding in esteem an offending member of the family determine an individual's reaction to and his feeling toward guidance and direction.

The meaning of mental and social health is being enlarged from the old concepts which referred largely to attitudes and behavior in home, community, state, and nation to attitudes and behavior toward the world at large. Thus by preventing mental illness and by building mental health, homemakers are making their contribution toward world health and welfare.

How Can Expenses of Sickness Be Met?

After the family has taken every known precaution, severe illness may still become a major problem. How can the expenses of an illness be met? The accumulation of a capital fund (see page 242), whether in emergency savings or in some more permanent form, is always a good backlog against unexpected demands. But if the drain is severe, those resources may not prove adequate. Protective insurance is the best solution to this problem.

Some interesting data on the cost of medical and dental care for two groups of workers—salaried workers and wage earners—are given here. The data were gathered in two districts in the

San Francisco area. It will be noted that there is little difference between the two groups in the cost of medical care but considerable difference in the cost of dental care. Few health insurance plans cover costs of dental care or care of the eyes.

ANNUAL BUDGET FOR FAMILY MEDICAL AND DENTAL CARE *

Item	Salaried Worker	Wage Earner
Total cost	\$543.76	\$468.08
Medical and hospital care	288.94	283.62
Eye glasses	5.13	5.08
Drugs and medicines	33.50	33.50
Dental care	216.19	145.88

* *Quantity and Cost Budgets for Two Income Levels.* The Heller Committee for Research in Social Economics, University of California, Berkeley. Prices for the San Francisco Bay Area, September, 1957 (including sales tax), pp. 48, 81.

Types of Health Insurance

Against the excessive costs of illness and hospitalization, one is best protected by contracting for medical, hospital, and accident insurance. Though such insurance may not pay all the costs of an illness or an accident, it will greatly simplify the problem of meeting them. Wherever possible, contributory insurance should be the basic method for meeting the costs of medical care. Regular payments are usually an accepted feature of group medical care insurance or of hospital service associations.

The earliest contributory group plans were the independent type, which wrote both hospitalization and accident insurance. Such plans started with the hospital department of the Southern Pacific Railroad in 1868, which offered their employees doctor's care at home, in the offices of the company, or in a hospital. From that program have developed various labor union plans. By 1950 an estimated 10 million workers had hospitalization and medical care assured them, largely through collective bargaining with their employers. A few unions offer, through their own

health centers, very comprehensive health care contracted for through the Blue Cross and Blue Shield plans.¹¹

In addition to the labor union plans, many companies, industries, and institutions, including colleges and universities, have their own independent group plans. Some of these plans offer hospitalization alone and others offer a specific amount of service and doctor's care.

The most widely used group plan today for hospitalization is the Blue Cross of the American Hospital Association. Specified services are paid for by the organization. These services may be supplemented by group coverage under the Blue Shield, an organization of the American Medical Association. Under the Blue Shield coverage specified amounts are paid for doctor's and surgeon's fees. If a member leaves his group, he may arrange to have his coverage continued on an individual basis for a higher premium. Family coverage also may be obtained under Blue Cross and Blue Shield, but it will not include children who are 19 years old or older.

More than 60 percent of our population now have some form of voluntary protection against the hazards of illness.¹² According to Dewhurst, 100 million Americans have hospitalization coverage or a prepayment plan of some kind; 80 million have surgical protection; 60 million have medical coverage.¹³

Private companies also write both hospital and accident insurance. The provisions of the policies vary and may pay for hospitalization for a certain number of days a year, for surgeon's fees, for a specified number of doctor's calls in the hospital, for physiotherapy, and for medicines. Accident policies pay for hospitalization and in some cases pay lump sums for certain kinds of injuries and as reimbursement for wages lost.

Groups of progressive doctors also have established prepayment plans for medical and surgical care. Available to groups,

¹¹ Helen Hollingsworth, Helen L. Johnson, and Anna Macbaney, *Health Programs Digest Publication 191*, Division of Medical and Hospital Resources, U. S. Public Health Service, 1952, pp. 6, 7.

¹² Odin W. Anderson, *National Family Survey of Medical Costs and Voluntary Health Insurance*, Preliminary Report, Health Information Foundation, New York, January 14, 1954, pp. 16, 17.

¹³ Dewhurst, *op. cit.*, p. 323.

such plans are often, though not always, adjuncts to Blue Cross coverage. Many families would like to have insurance which would cover all the costs of illness, such as doctor's calls at home or at the office, hospitalization for surgery or illness, surgeon's fees, dental and nursing services, medicines, and such appliances as glasses. Insurance of this kind is available but not under a group plan, and the cost of the premiums is so high as to be prohibitive for many families who must rely upon some kind of group coverage at lower rates.

The difference between hospital and medical insurance and a health policy, which is income protection, should be clearly understood. Hospital insurance usually covers a specified amount for the hospital room and for hall service; a specified allowance for extra costs such as fees for the operating room, laboratory tests, and other tests of a routine nature; and it may cover physician's calls at the hospital. When choosing a hospitalization policy these are features which each family should appraise.

Medical insurance usually covers an allowance for the doctor, medications, routine tests, and may have a schedule of allowances for operations. It does not usually include allowance toward a hospital room and room care.

Strictly speaking, a health policy refers to insurance set up primarily for income protection. It usually indicates a stipulated amount to be paid weekly or monthly for a definite period of disability, the details varying according to a given policy. This form of protective insurance requires a health examination of the applicant. The policy needs to be carefully selected and clearly understood by the applicant if he is not to risk disappointment when the time comes for a settlement to be made.

Whatever insurance is taken, homemakers should be sure that they are getting the best coverage possible and that the policy has the backing of a company of good standing. All policies should be read carefully by the insured and then note made of the provisions and the expiration date on a page in the family ledger. Although protective insurance such as described cannot be considered an asset in the family's capital fund, the ledger is a good place to record the above data; it can then be easily found when needed.

Problem of Aging Population

The fact that 11 percent of our population is now more than 65 years of age, and the percentage is growing higher by the year, poses many community as well as personal problems to be studied and solved.

A health survey made in Hagerstown, Maryland, in 1923 and in a follow-up 20 years later will give an idea of what is involved in this problem. It was estimated from the findings that out of every 1,000 persons who are well at 45 approximately 100 will require medical attention during the next 5 years for the onset of a chronic disease of major impairment, and that nearly 250 out of every 1,000 persons who are well at 60 will develop within 5 years a chronic ailment for which they will probably seek, or will need, medical attention for the rest of their lives. Perhaps the major conclusion from this survey is that a substantial proportion of persons who are ill at 65 have had the same or another chronic illness for at least 20 years, and that chronic illness increases rapidly after 45.¹⁴

The wisdom of carrying forward into the later years some form of protective insurance against the expenses of illness and of making other long-time plans to meet such expenses is emphasized by facts such as these. The need for community organization to meet the problems of those who must have public help because of illness is also indicated.

Participation in Community Health Activities

Disease prevention and control within one's own family are very important parts of a family's contribution to community health. And just as early attention to prevention and control measures within a family saves time, energy, and money for that family, so also do preventive measures in the community contribute to the well-being of each individual family.

One of the first requirements, if one is to participate intelligently in programs to improve health conditions in the com-

¹⁴ Antonia Ciocco and Philip S. Lawrence, "Illness Among Older People in Hagerstown, Maryland," in *Illness and Health Services in an Aging Population*, Publication No. 170, U. S. Public Health Services, 1952, pp. 26-37.

munity, is to learn about existing agencies and the ways in which their activities are directed to health improvement. Such an agency, for example, might be the county public-health service. For the first stages of family life, some communities offer prenatal and baby clinics, child-guidance clinics, free X-rays for some conditions, and immunization to certain diseases. For the second and third stages there are free and pay clinics in some communities, and sometimes counseling services. For the fourth stage the family will rely more on prepaid hospital and medical care. Many communities, however, are becoming increasingly conscious of the needs of this older group and are including them in plans for housing and recreation as well as medical care.

The city health ordinances for milk inspection, sewage and garbage disposal, and quarantine regulations in cases of communicable diseases are also of concern to those who wish to be informed about community health measures. Indeed any activity that affects family health should be of interest to every man and woman homemaker in a community.

Participation in programs for improving the health of a community is a civic responsibility that should be shared by all families in the community, for all families share in the benefits from an improved general health level, including the lowering of the cost of maintaining family health.

A Community Health Survey

Families desiring to help improve health conditions in their community can make no greater contribution than to initiate and help carry out a thorough study of existing health measures and facilities. Through such a study, the specific needs of the community can be located and a program of improvement developed that is based on actual facts. Many women's organizations are glad to carry forward a worthwhile community project such as this.

A check sheet for a community health survey which can be expected to lead to health improvement in the community has been developed by the Extension Service of the Iowa State College. (See pages 531-534 in the Appendix.) The following items of study are included in the check sheet:

A. *Health organization*: Extent of participation of community in state and national programs as well as in local programs; general health consciousness, and attitudes toward health regulations.

B. *Sanitation*: Public and home conditions related to this subject.

C. *Food supply*: Conditions of milk production and distribution, of fresh fruit and vegetable supplies, and of public food service.

D. *Prenatal facilities*: Provisions for the care and education of expectant mothers.

E. *Infant and preschool child care*: Assistance to mothers in the care of infants, preschool physical examinations, and preschool immunization.

F. *School health*: Frequency of inspection of school buildings and grounds by sanitary engineers, medical inspection of school children, training of teachers for health education, and high-school courses in health, hygiene, first aid, and home nursing.

G. *Health programs*: Programs of organization such as 4-H clubs, Boy Scouts, and Camp Fire Girls, Red Cross, and American Legion, all of whom emphasize various phases of health and safety.

Obviously, a study of this kind cannot be carried out effectively by one or two families, but when done cooperatively by many families the community becomes aware of its specific and urgent health needs. Programs of improvement then can be more effectively projected.

As a demonstration of what an extensive effort to improve health can do, a program similar to the one described above was organized and carried on for six years in a crowded section of New York City. It was called the Bellevue-Yorkville project.¹⁵ Funds from public and private agencies provided an adequate but not a lavish budget. The program demonstrated that, through cooperation and the intensive application of known health measures, both the extent of sickness and the mortality rates could be substantially reduced. Deaths from tuberculosis were lowered by 30 percent, from diphtheria by 82 percent, from scarlet fever 67 percent, and infant mortality was reduced 22 percent.

A complete public health service today would be able to do more for a community than was possible when the above program was carried through. It would have a staff of laboratory

¹⁵ C. E. A. Winslow and Savel Zimand, *Health Under the "El,"* New York: Harper and Brothers, 1937, pp. 181-184.

technicians to aid physicians; nutritionists to appraise the nutritional status of the community and to advise families, schools, and industrial plants on diets and meal planning; clinics for preventive dental care of children, of pregnant women, and of industrial workers; clinics for the diagnosis of cancer, diabetes, and heart disease; services for accident prevention; nursing care for those who need not or cannot go to a hospital; and a mental health clinic providing child-guidance services.

Here is a field of endeavor for the college trained person. A study of the activities of graduates of the Division of Home Economics made at Iowa State College showed that about 50 percent of the graduates in the years 1933 to 1942 and 40 percent in 1943 to 1952 were members of service and welfare groups, and that half of these graduates served as officers and committee members of these groups.

Leisure Time and Recreation

Recreation should be recognized as an integral part of the total pattern of family living. In these days of the shortened work day and week, workers find that they have many hours of leisure time which they may devote to recreation activities. It is natural that at the end of a period of work people feel an urge to seek diversion and change, and for this homemakers need to plan.

For individuals recreation consists of doing those things each wants to do in his own time and at his own pace. More broadly stated in reference to families as well as individuals, "Recreation relaxes strain and tension, releases energy and pent-up feelings, starts the fire of enthusiasm burning. Recreation has the power to revitalize, to enlarge one's capacity to enjoy living, to bring physical and mental health."¹⁶ Witty and Bricker call recreation an escape from everyday living.¹⁷ Others stress as values of leisure-time recreation the possibilities for the en-

¹⁶ *Money Management—Your Recreation Dollar*, Household Finance Corporation, Chicago, 1956, p. 5.

¹⁷ Paul Witty and Harry Bricker, *Your Child and Radio, Television, Comics, and Movies*, Science Research Associates, 57 West Grand Avenue, Chicago, 1952.

richment of personality and the prevention of emotional and mental illnesses.

Whatever the type of recreation one chooses, the individual today need have no guilt feelings concerning such use of leisure time, for while there are still whole communities where play may be frowned upon as a waster of time, recreation as such is almost universally accepted. But an adult needs to study the possible uses of leisure time and decide which will give him the most satisfaction.

Need for Family-Centered Recreation

Many types of organized recreation for the younger members of the family tend to take them away from home. Play and diversion of this nature have an important place in their lives. In such groups an individual learns self-direction and self-expression in new and different situations. The homemaker, however, cannot accept this arrangement as completely adequate, for she knows the value of family-centered recreation for the family as a whole and for those who compose it. Overstreet, writing of the family doings of his youth, says: "This is the great thing about a home—it is the jumping off place for all sorts of adventures."¹⁸

That recreation in the home is considered highly important by many young people themselves was indicated by the answers of 1,300 Maryland youths¹⁹ who were asked by the American Youth Commission, "What can we do for and with youth so that they can do more for themselves?" While these young people asked for more parks, playgrounds, swimming pools, and organized sports, they also asked for meeting places for group games, music, handicrafts, and dramatic and discussion groups, and the home is largely the place for these activities. They gave no report, however, on the percentage of their homes that were open for social gatherings. They expressed definite preference for active and creative recreation rather than for the passive types such

¹⁸ H. A. Overstreet, "Family Recreation," *National Parent Teacher*, Vol. 39 (April, 1945), pp. 13-15.

¹⁹ J. Frederick Dewhurst and associates, *America's Needs and Resources*, New York: Twentieth Century Fund, 1947, p. 293.

as listening to the radio, going to motion pictures, and automobile riding.

A group of youths from a county in New York State reported ²⁰ that 87 percent of their families made no provision for and no effort to carry on sociability activities as a family group. Such a condition is especially deplorable in view of the fact that the nation looks to the family to create and maintain a unity and solidarity from which may come a rich, good life for our country. With so many influences that tend to divide and separate families—the weakening of family traditions, inadequate housing, the multiplicity of places to go—the homemaker needs to think of shared family recreation as a means of helping family members to develop into well-adjusted, mature adults.

Recreation or shared play in the home draws the family together in understanding and happiness. It gives family members a kind of enjoyment that no one of them could have alone. It builds a feeling of belonging, which forms a background of security and confidence for members of the group. Slavson ²¹ reminds us that education everywhere and especially in many homes relies too much upon the repressive don't. Recognition of the natural primitive drives in children should stimulate parents to guide them to sublimation of their anti-social feelings. Arbitrarily requiring the child to repress such feelings will not release his better impulses nor aid him in acquiring desirable habits of self-direction.

The homemaker who plans for play in the home provides the release so essential today for children and young people. The complexity of our present-day environment limits free motion, cuts off avenues for satisfying curiosity about the natural world and overstimulates emotion. Curtailed physical motion and repressed emotions lead to frustrated and antisocial feelings. Laughter and play, which may consist of no more than the whole family tossing a rag ball merrily about, discharges repressed or hidden cravings in ways approved by the group, creates desirable social attitudes, and furthers mental health.

²⁰ D. C. Wrenn and D. L. Harley, *Time on Their Hands*, American Council on Education, Washington, 1941.

²¹ S. R. Slavson, *Recreation and Total Personality*, New York: Association Press, 1946, p. 34.

Recreation authorities say that the family that plays together stays together, and they stress the fact that family recreation is an imperative for enriched family life.²²

Recreation Management

The question arises: In what way does recreation entail management through planning?

Just fitting recreational types of activity into the family-life plan, as well as into the daily schedule, calls for a high type of planning. For the children it means time for free as well as organized play, time to develop and work on a hobby, time to read and dream, time to watch and listen to suitable programs on radio or television. For older children it means in addition sports, both active and as a spectator, visiting, and entertaining.

Recreation management is related to housing, since space must be planned for family social life, play, and hobbies. It is related to money management since recreation activities and pursuits often call for money—money for hobbies, for admissions to commercial forms of entertainment, for materials for do-it-yourself projects. Today spending for recreation, including vacations, is second only to defense. The cost in 1957 was 34 billion dollars. Gardening, the number one hobby, rose in expenditures in 10 years from 211 to 269 million dollars.

Time and energy planning is also an important part of recreation management. A definite time in the day or evening when all members of the family are at home could be set aside for the family get-together. At such times families can help each other with hobbies, play games, read aloud, or converse, enjoy music or television or radio, perform on musical instruments, or sing together, each member choosing at times the thing he or she likes best to do or does best.

Other types of family recreation such as picnics, barbecues, excursions, and the like entail an adjustment of work, time, and energy, and in most instances need to be planned for in advance. However, the pick-up expedition often brings a family together for a quick take-off and results in an invaluable group feeling.

²² Florence Greenhoe Robbins, *The Sociology of Play, Recreation and Leisure Time*, Dubuque, Iowa: Wm. C. Brown Company, 1955, p. 54.

When planning a recreation program, the following considerations are important:

The activities should be fitted into the family time-and-work schedules and the family finance plans, in order to assure that the program can be realized.

They should fit the aptitudes and interests of the family members and be freely chosen by them, each in turn.

They should provide for plenty of fun. Family fun enriches family life and influences mental health.

They should be so integrated as to build group characteristics, such as companionability and cooperativeness. A buffet supper in the living room for adult members of the family and a snack party in the kitchen for young people is an example of integrated activities.

The program should include participation in community recreational activities, thus building interest in people outside the family and in community conditions.

It should include elements of creativeness to enhance its educational value.

Problems of Television Management

The newest form of recreation, watching television, is having a tremendous impact on family living. It has created both new enjoyments and new problems. Most American homes in the metropolitan areas now have television sets, and watching programs has changed greatly the use of their leisure time. Although families stay at home more, go to fewer movies and theaters, and read fewer books, newspaper and magazine reading is reported to have changed little. On the whole it is surprising how the American public has taken this new medium in stride without a death blow being dealt to any other.²³

With a definite number of hours for recreation for your family, how many are spent watching television? The Nielsen Researcher, a publication of a marketing research organization, reports that if your family spends six hours a day watching television, it could consider itself average; that one out of five families in their survey kept their television sets on all day; that the

²³ Batten, Barton, Durstine, and Osborn, Inc., *What's Happening to Leisure Time in Television Homes?* New York: 1951.

next 20 percent got along with six hours; that another 20 percent boasted that they were disciplined in the use of television but found that it took an hour and twenty-two minutes to satisfy the desires of everyone in the family.²⁴ Television watching reaches its peak during the evening, when more than 38 million homes are viewing a program at some time during the six-hour period.²⁵

The value or lack of value of television watching is a concern to all thoughtful homemakers. Bogart looks upon television as an endless source of ideas and information, all of which have a powerful influence on individual and family values.²⁶

Educators, psychologists, and psychiatrists have made studies of the hours children and teen-agers spend watching television. Because of the newness of the medium, no conclusions as to the long-range effects can be drawn, but some significant facts are available.²⁷ Five- and 6-year-old children in homes where there are sets watch television four or more hours a day. Seven- to 17-year-olds watch an average of three hours a day. Choices of programs among 2,100 grade and 20 high-school students were close to being typical of the interests of developing children, ranging from Mickey Mouse to science fiction, rocketry, and atomic expeditions. Exposure of young folk to undesirable programs will doubtless occur in every family. The question is how such programs affect children and teen-agers. Do murder and mystery stories lead to fears, bad dreams, disobedience, and delinquency? Or are these programs outlets for feelings of anger and aggressiveness?

It is probably true that most children will take such programs in their stride and go on to active and orderly lives. The life and the point of view of the insecure and maladjusted child may, on the other hand, be permanently conditioned by them. "Providing a child with a secure and happy home life, helping him to develop a variety of interests and activities and some taste re-

²⁴ The Nielsen Researcher, December, 1956.

²⁵ The Nielsen Newscast, October, 1957.

²⁶ Leo Bogart, *The Age of Television*, New York: Frederick Ungar Publishing Company, 1956, p. viii.

²⁷ Witty and Bricker, *op. cit.*, p. 5.

garding the entertainment he chooses are probably the most important things parents can do if they wish to protect their children from the ill effects of some of the entertainment on radio and television and in comics and movies."²⁸

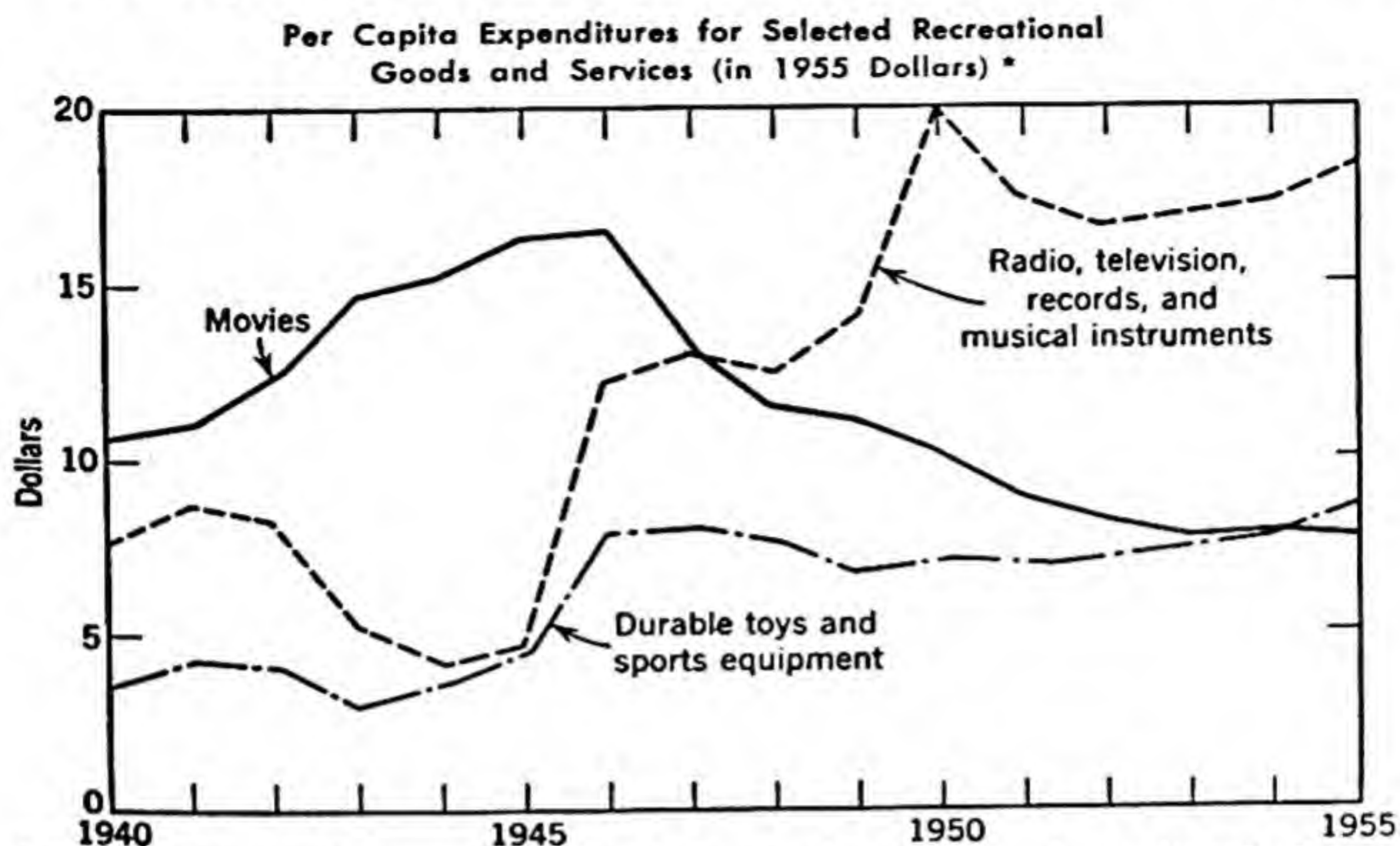
To help develop good taste and desirable standards and a technique of evaluation some families discuss and rate programs after seeing them. Witty and Bricker submit the following questions as bases for judging a program.²⁹

- Does the program give enjoyment? Is it related to play or school?
- Is it wholesome adventure, humor, fantasy, or suspense?
- Is it sincere and constructive, encouraging decent human relations?
- Is it fair to all?
- Does it stimulate desirable activities?
- Does it have artistic qualities with respect to music, script, settings, sound effects, photography?
- Is it suited to the child's level of maturity?
- Is the language suitable?
- Is the overall effect on the child likely to be desirable; that is, does it give a larger understanding of the world?
- Does it help to make the child a more informed, useful, responsible, and interesting person?

Regardless, however, of the merits or demerits of various programs, one of the real problems of homemakers is to keep within reasonable bounds the amount of time the children devote to viewing television. Some parents limit the smaller children to certain programs. For children of school age, even teen-agers, some parents see to it that the time used does not interfere with school work. When grades begin to slump below a reasonable level, certain hours of television viewing, or all viewing, is withdrawn, and the privilege is restored only when the scholastic deficiency has been taken care of. The placing of the television set where it will be possible to exercise closer control over its use is another matter in the management of this entertainment device to which many parents find it worthwhile to give serious thought.

²⁸ *Ibid.*, pp. 22, 23.

²⁹ *Ibid.*, p. 38.



* *Rural Family Living*, Household Research Branch, Agricultural Research Service, U. S. Department of Agriculture, March, 1957.

Figure 45.

Changes in Leisure-Time Pursuits

Figures on expenditures for goods and services used for recreational purposes throw interesting light on changes that have taken place in recent years in the leisure-time pursuits of the American people. (See Figure 45 and Table 21.)

In Figure 45 the decline in the per-capita expenditure for movies between 1946 and 1955 is to be noted, and the great increase in the expenditure for the radio-TV group, indicating how the latter has detracted from interest in the movies.

The more detailed list of items given in Table 21 on a percentage basis for the years 1940 and 1955 supplies further interesting comparisons. During this period admissions to movies dropped from 20 percent of the total recreation expenditure to 10 percent; the magazine-newspaper group dropped from 16 percent to 13 percent, and the radio-TV group advanced from 14 percent to 23 percent, or to more than half again as much as 15 years earlier.

In both 1940 and 1955, it is to be noted that the movie and

TABLE 21. SHIFT IN RECREATION EXPENDITURES, 1940 TO 1955 *

Item	Percent of Total Recreation Expenditures	
	1940	1955
1. Admissions to movies	20	10
2. Magazines, newspapers, sheet music	16	13
3. Radio, television, records, musical instruments	14	23
4. Nondurable sport equipment and toys	8	10
5. Durable sport equipment and toys	7	11
6. Books and maps	6	4
7. Commercial participant amusements	5	5
8. Flowers, seeds, potted plants	5	6
9. Clubs and fraternal organizations	5	5
10. Admissions to spectator sports	3	2
11. Admissions to legitimate theater, operas, etc.	2	2
12. Parimutuel net receipts	1	3
13. Other	8	6
Total	100	100

* *Rural Family Living*, Household Research Branch, Agricultural Research Service, U. S. Department of Agriculture, March, 1957.

radio-TV groups together took about one-third of the recreation dollar.

The marked increase in expenditures for "durable sport equipment and toys" shown by both the graph and table indicates an encouragingly greater interest in those types of recreation in which the consumer is a participant. These expenditures in 1955 were larger than those for movie admissions.

Recreation and the Community

The family that has built up the desire to have its recreation as a group will find help in the programs of community organizations such as 4-H clubs, extension services, home demonstration agencies, civic, hobby and nature clubs, and church and school associations. An extensive amount of literature on the use of the greatly increased amount of leisure time now available to people has appeared in recent years. Ways of using leisure for

recreation are suggested and many of the values to be gained from that kind of use are explained.³⁰

The National Recreation Association³¹ has set up standards for the numbers and types of areas and places needed for recreation in towns and cities in relation to population. One of the very significant moves is to provide more places and more adequate places for group and family recreation, both indoors and out. One objective is to bring play areas nearer the residential neighborhoods. Each neighborhood might well have indoor recreation facilities centered in a recreation building or an indoor recreation center that would provide adequate gymnasium space, an assembly hall or auditorium, lounge room, play room, and a number of small rooms for club meetings, arts and crafts, and other small-group activities.

Such facilities would help in the solution of many family recreation problems. There would be programs and places for people of all ages, including the ever-increasing number of older people, as well as for younger people and children. Groups of older people would have a place to meet, visit, play games, sing, or play instruments. The younger groups could divide according to interests. Fathers and mothers, with sons or daughters, would have opportunities for expression in art, manual crafts, folk dancing, or other bent and interests. Such participation in community recreational activities would offer many benefits to the family and to the individual from the standpoint of health, social activities, and money. It would lessen the urge to find recreation in commercial offerings, which often are a form of "escape" and tend to make the young, and adults also, less and less willing to shoulder a normal amount of responsibility for creating their own recreational activities.

No consideration of health management in family living can ever overlook the important place recreation plays in the development of socially adequate family members and citizens. To stand the stresses and strains of today without undue tension,

³⁰ H. D. Edgren, "Contributions of Recreation to the Individual," *Journal of Health and Physical Education*, Vol. 15 (October, 1944), pp. 437-438.

³¹ *Standards for Neighborhood Recreation Areas and Facilities and Standards for Playfields, Recreation Buildings, Indoor Recreation Facilities*, New York: National Recreation Association, 1943.

people must learn to compensate for them through play and recreation. Thus planning for health and recreation through all stages of the family cycle is a vitally important responsibility in the modern American home.

Additional References

- Beattie, Walter M., *Dane County Survey of Health Needs, Services and Facilities for Aging and Long-Term Patients*, Madison, Wisconsin: A publication of the Community Welfare Council, July, 1956.
- Bigelow, Howard K., *Family Finance*, Philadelphia: J. B. Lippincott Company, Revised 1952, Chapter 13.
- Brightwell, Charles K., and Harold D. Meyer, *Recreation*, Englewood Cliffs, N. J.: Prentice-Hall, 1953.
- DeGrazia, A., editor of *Grass Roots Private Welfare*, a group of winning essays of 1956 National Awards Competition, The Foundation for Voluntary Welfare, New York: New York University Press, 1957. Sections on mental health, alcoholism, juvenile delinquency, neighborhood rehabilitation, the deaf, the cripples, the blind, chronic illness, health education and medical care, migrant workers, child welfare and aid to mothers, the aging, recreation, special financing methods, and the general spirit of voluntarism.
- Household Finance Corporation, *Money Management booklets*, Chicago, *Your Health Dollar*, 1956.
- Lynes, R., "Time on Our Hands," *Harper's* 217, No. 1298 (July, 1958), 34-39.
- Morgan, James N., *Consumer Economics*, Englewood Cliffs, N. J.: Prentice-Hall, 1955, Chapter 7.
- Overstreet, Harry A., *A Guide to Civilized Leisure*, New York: W. W. Norton, 1934.
- "Recreation in the Age of Automation," *Ann. Am. Acad. Pol. Soc. Sci.*, Vol. 313 (September, 1957), pp. 1-147.
- Robbins, Florence Greenhoe, *Educational Sociology*, New York: Henry Holt and Company, 1953, pp. 13-41.
- Rusk, M. D., Howard A., *Rehabilitation Medicine*, St. Louis: The C. V. Mosby Company, 1958.
- Terris, M., "The Changing Face of Public Health," *Am. J. Public Health* 49, No. 9 (Sept., 1959), 1113-1119.
- "The New Health Insurance," *Changing Times*, June, 1955.
- Troelstrup, Arch W., *Consumer Problems and Personal Finance*, New York: McGraw-Hill Book Company, Second Edition, 1957, Chapter 11.
- Zelomek, A. Wilbert, *A Changing America: at Work and Play*, New York: John Wiley and Sons, Inc., 1959.

Appendix

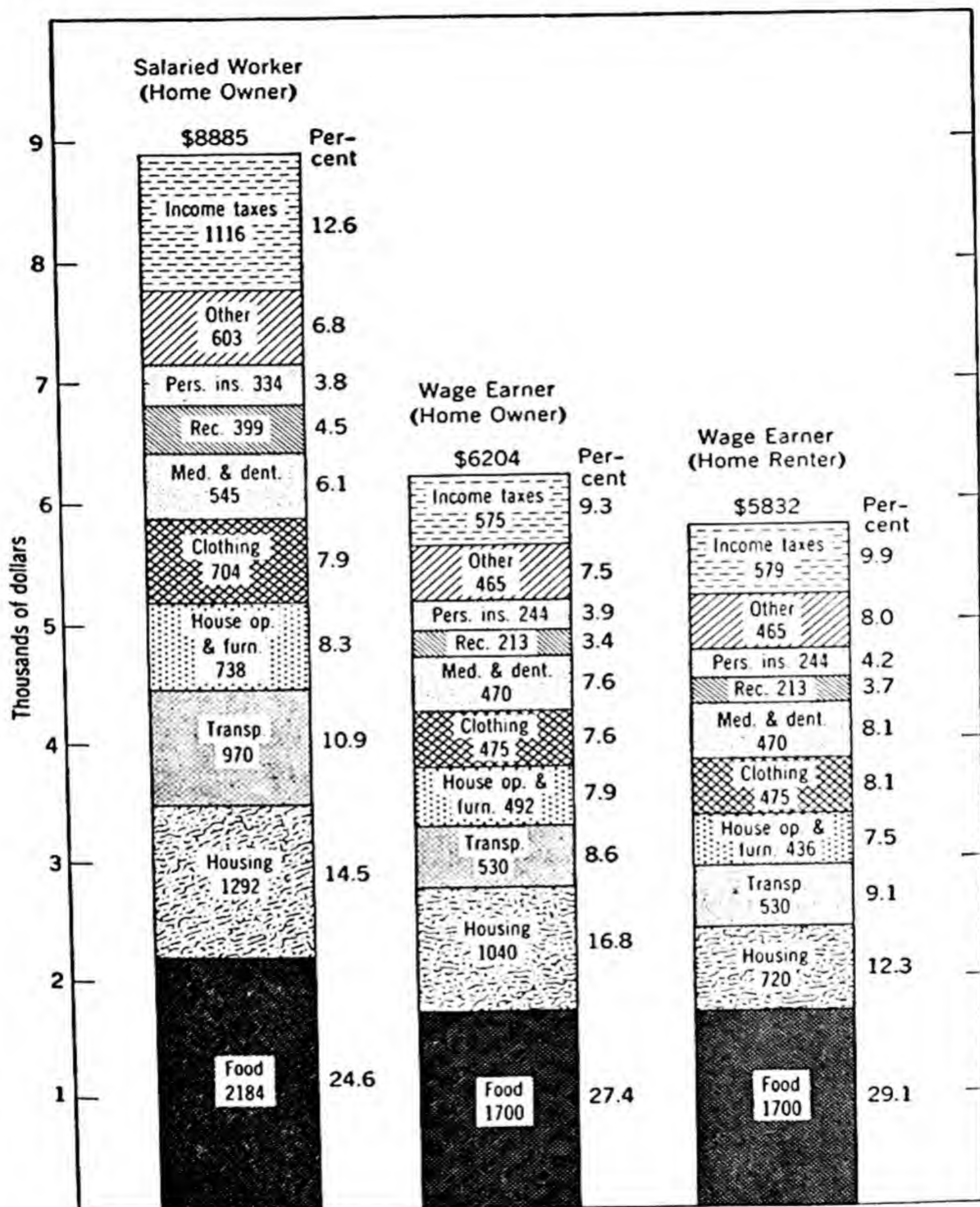


Figure 46. Budgets for salaried worker and wage earner with costs and percents of major categories, September 1957. (*Quantity and Cost Budgets for Two Income Levels*, The Heller Committee for Research in Social Economics, University of California, Berkeley.)

TABLE 22.* INCOME DISTRIBUTION OF SPENDING UNITS AND FAMILY UNITS ACCORDING TO MONEY INCOME BEFORE TAXES¹
(Percent)

Money Income Before Taxes	Spending Units ²						Family Units ³					
	Distribution of Units			Total Money Income			Distribution of Units			Total Money Income		
	1956	1955	1954	1956	1955	1954	1956	1955	1954	1956	1955	1954
Under \$1,000	9	11	10	1	1	1	8	11	9	1	1	1
\$1,000-\$1,999	12	12	13	3	4	5	11	11	12	3	3	4
\$2,000-\$2,999	12	13	14	6	7	8	10	11	11	5	6	6
\$3,000-\$3,999	12	14	17	8	10	13	11	13	15	7	9	11
\$4,000-\$4,999	14	14	14	12	13	14	13	13	14	10	11	12
\$5,000-\$7,499	24	22	21	28	28	28	25	24	24	27	28	29
\$7,500-\$9,999	9	8	6	15	14	11	11	9	8	16	15	13
\$10,000 and over	8	6	5	27	23	20	11	8	7	31	27	24
All cases	100	100	100	100	100	100	100	100	100	100	100	100
Median income ⁴	\$4,250	\$3,960	\$3,700	—	—	—	\$4,700	\$4,260	\$4,100	—	—	—
Mean income ⁵	\$5,140	\$4,650	\$4,420	—	—	—	\$5,640	\$5,060	\$4,900	—	—	—
Number of cases	3,041	3,014	3,119	—	—	—	2,770	2,729	2,805	—	—	—

* Source: "The Financial Positions of Consumers," Federal Reserve Bulletin, Board of Governors of Federal Reserve System: August, 1957, Supplementary Table 1, p. 892.

¹ Income data for each year are based on interviews early in the following year.

² A spending unit includes all persons living in the same dwelling and related by blood, marriage, or adoption, who pool their incomes to meet major expenses. Single-person spending units are included.

³ A family unit includes all persons living in the same dwelling who are related by blood, marriage, or adoption. Single-person families are included.

⁴ Median income is that of the middle spending unit or family unit in a ranking of all units by size of money income before taxes.

⁵ Mean income is obtained by dividing aggregate money income before taxes by number of spending units or family units.

TABLE 23.* INCOME DISTRIBUTION OF SPENDING UNITS WITHIN OCCUPATIONAL GROUPS¹

(Percent)

Money Income Before Taxes	Professional and Semi-professional		Managerial		Self-employed Businessman		Clerical and Sales		Skilled and Semi-skilled		Unskilled and Service		Farm Operator	
	1956	1955	1956	1955	1956	1955	1956	1955	1956	1955	1956	1955	1956	1955
Under \$1,000	(2)	2	(2)	(2)	2	2	3	2	2	2	12	14	16	19
\$1,000-\$1,999	3	2	2	2	4	7	7	6	6	5	16	23	23	29
\$2,000-\$2,999	3	3	2	2	6	6	12	15	10	11	19	23	25	15
\$3,000-\$3,999	10	8	6	9	9	10	16	18	13	16	21	19	12	15
\$4,000-\$4,999	16	12	10	15	9	10	17	15	20	22	12	11	7	10
\$5,000-\$7,499	31	37	36	28	19	25	27	29	36	32	17	8	10	10
\$7,500-\$9,999	17	16	21	21	18	14	12	10	9	10	2	2	3	1
\$10,000 and over	20	20	23	23	33	26	6	5	4	2	1	(2)	4	1
All cases	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Median income	\$6,250	\$6,250	\$7,000	\$6,760	\$7,500	\$6,000	\$4,600	\$4,290	\$4,940 ²	\$4,660	\$3,000	\$2,520	\$2,320	\$2,190
Mean income	\$7,700	\$8,140	\$8,790	\$8,280	\$10,750	\$8,180	\$5,190	\$4,980	\$5,030 ³	\$4,830	\$3,250	\$2,840	\$3,350	\$2,860
Number of cases	314	313	223	183	261	262	372	365	795	810	287	299	187	154

* Source: "The Financial Positions of Consumers," Federal Reserve Bulletin, Board of Governors of Federal Reserve System: August, 1957, Supplementary Table 3 p. 893.

¹ Income data for each year are based on interviews early in the following year. Occupation refers to head of spending unit.

² No cases reported or less than one-half of 1 percent.

³ The median income of skilled workers was \$5,350 in 1956 and that of semiskilled workers was \$4,400. Mean incomes were \$5,640 and \$4,480, respectively.

TABLE 24.* AVERAGE MONEY RECEIPTS AND OUTLAYS OF WAGE AND CLERICAL WORKER FAMILIES IN LARGE CITIES IN 1934-36 AND 1950

(All families had approximately the same real income, in 1950 dollars)

Item	1934-36 Survey		1950 Survey	
Number of families covered	391		5,994	
Average family size (persons)	4.0		3.3	
In 1950 Dollars				
Average money receipts				
Money income before personal taxes	\$3,944		\$4,299	
Money income after personal taxes	3,942		4,005	
Other receipts	4		33	
Total receipts (after taxes)	3,946		4,038	
Average outlays				
Current outlays for goods and services (total)	\$3,652	100.0	\$4,076	100.0
Food and drink	1,385	37.9	1,335	32.6
Clothing	498	13.6	473	11.6
Shelter (current expense)	446	12.2	448	11.0
Fuel, light, refrigeration, and water	197	5.4	153	3.8
Household operation	131	3.6	167	4.1
House furnishings and equipment	179	4.9	281	6.9
Automobile purchase and operation	280	7.7	457	11.2
Other transportation	77	2.1	81	2.0
Medical care	121	3.3	213	5.2
Personal care	79	2.2	93	2.3
Recreation	121	3.3	191	4.7
Reading	38	1.0	36	.9
Education	22	.6	19	.5
Tobacco	61	1.7	80	2.0
Miscellaneous goods and services	17	.5	49	1.2
Gifts and contributions	128	—	136	—
Personal insurance premiums	157	—	183	—
Net change in assets and liabilities	+9	—	-192	—
Payments on principal of mortgages and downpayments on owned homes	42	—	211	—
Balancing difference (average)	0	—	-165	—

* Source: *Monthly Labor Review*, Vol. 79, No. 9 (September, 1956), Table 3, p. 1021. Explanatory footnotes omitted.

TABLE 25.* INCOME OF SPENDING UNITS AT DIFFERENT STAGES IN THE LIFE CYCLE

	Stages							
	All Spending Units	Young Single	Young Married Childless	Young Married— Youngest Child Under 6	Young Married— Youngest Child 6 or Over	Older Married— Over 45 with Children	Older Married— No Children Under 18	Older Single
	Others							
Median income, 1952 ¹	\$3,400	\$2,600	\$4,600	\$4,200	\$4,500	\$4,400	\$3,600	\$1,700
Proportion with income over \$4,000 in 1952 ¹	41%	17%	59%	53%	59%	57%	44%	14%
Median income, 1953 ²	\$3,800	\$2,600	\$4,800	\$4,300	\$5,000	\$4,300	\$3,900	\$1,700
Proportion with income over \$4,000 in 1953 ²	47%	18%	65%	60%	72%	60%	49%	21%
								\$3,000
								34%
								\$2,700
								23%

* Source: *Consumer Behavior*, Volume II, "The Life Cycle and Consumer Behavior," New York: Edited by Lincoln H. Clark, New York University Press, 1955, Table 4, p. 39.

¹ Based on data from 1953 Survey of Consumer Finances covering income in 1952. Number of cases, 3,097.

² Based on data from 1954 Survey of Consumer Finances covering income in 1953. Number of cases, 3,000.

TABLE 26.* AVERAGE ANNUAL HOUSEHOLD EXPENDITURES BY ANNUAL HOUSEHOLD INCOME

	All Households	Annual Household Income						
		Under \$2,000	\$2,000-\$2,999	\$3,000-\$3,999	\$4,000-\$4,999	\$5,000-\$6,999	\$7,000-\$9,999	\$10,000 or More
Number of U. S. households	49,140,000	8,610,000	7,080,000	7,510,000	9,250,000	9,680,000	4,680,000	2,330,000
Average persons per household	3.3	2.7	3.2	3.4	3.4	3.4	3.7	3.8
All goods and services—Total	\$4,108	\$1,933	\$2,924	\$3,839	\$4,363	\$5,007	\$6,063	\$7,946
Food, beverages and tobacco	1,203	689	976	1,167	1,271	1,417	1,622	1,913
Clothing and accessories	494	223	311	495	518	566	778	1,082
Medical and personal care	222	139	153	209	225	262	286	444
Home operation and improvement	763	327	588	698	843	932	1,086	1,463
Home furnishings and equipment	344	132	229	286	354	449	523	809
Recreation and Recreation equipment	215	98	138	192	233	256	322	513
Automotive	591	206	375	554	621	797	925	1,156
Other goods and services	276	119	154	238	298	328	521	566
Number of households in sample	10,243	1,940	1,546	1,544	1,882	1,934	913	484

* Source: *Life* (periodical), *Study of Consumer Expenditures*, New York: Simon and Schuster, 1958, p.17.

TABLE 27.* DISTRIBUTION OF ANNUAL HOUSEHOLD EXPENDITURES BY ANNUAL HOUSEHOLD INCOME

	Annual Household Income							
	All Households	Under \$2,000	\$2,000-\$2,999	\$3,000-\$3,999	\$4,000-\$4,999	\$5,000-\$6,999	\$7,000-\$9,999	\$10,000 or More
Percent of U. S. households	100%	18	14	15	19	20	9	5
All goods and services—Total	100%	9	10	14	20	24	14	9
Food, beverages, and tobacco	100%	10	12	15	20	23	13	7
Clothing and accessories	100%	8	9	15	20	23	15	10
Medical and personal care	100%	11	10	14	19	24	12	10
Home operation and improvement	100%	7	11	14	21	24	14	9
Home furnishings and equipment	100%	7	10	13	19	26	14	11
Recreation and recreation equipment	100%	8	9	14	20	24	14	11
Automotive	100%	7	9	14	20	26	15	9
Other goods and services	100%	8	8	13	20	23	18	10

* Source: *Life* (periodical), *Study of Consumer Expenditures*, New York: Simon and Schuster, 1958, p. 19.

TABLE 28.* AVERAGE ANNUAL HOUSEHOLD EXPENDITURES BY STAGE IN THE LIFE CYCLE

	All Households	Household's Stage in the Life Cycle				
		No Children and Head Under 40	Younger Children	Older Children Only	No Children and Head over 40	
					Married Head	Single Head
Number of U. S. households	49,140,000	3,710,000	19,640,000	7,980,000	11,340,000	6,470,000
Average persons per household	3.3	1.9	4.7	3.8	2.3	1.4
All goods and services—Total	\$4,108	\$4,332	\$4,607	\$4,857	\$3,650	\$2,350
Food, beverages, and tobacco	1,203	1,111	1,379	1,442	1,069	667
Clothing and accessories	494	536	531	652	415	305
Medical and personal care	222	183	236	267	217	149
Home operation and improvement	763	845	895	745	653	537
Home furnishings and equipment	344	419	386	375	325	159
Recreation and recreation equipment	215	302	245	264	162	106
Automotive	591	726	655	747	525	246
Other goods and services	276	210	280	365	284	181
Number of households in sample	10,243	726	4,103	1,676	2,474	1,264

* Source: *Life* (periodical), *Study of Consumer Expenditures*, New York: Simon and Schuster, 1958, p. 30.

TABLE 29. OWNERSHIP OF HOUSES, CARS, AND TELEVISION SETS BY SPENDING UNITS AT DIFFERENT STAGES OF THE LIFE CYCLE *

	Stage							
	All Spend- ing Unit	Young, Single	Young Married, Childless	Young Married, Youngest Child Under 6	Young Married, Youngest Child 6 or Over	Older Married (Over 45), with Children	Older Married, No Children Under 18	Older Single
<i>Homes</i> Proportion of spending units owning their own home ¹ (early 1954)	50%	8%	38%	46%	66%	69%	71%	46%
<i>Cars</i> Proportion of spending units owning <i>one or more</i> cars (early 1954)	66	38	82	81	91	73	72	30
Proportion of spending units owning <i>two or more</i> cars (early 1954)	8	2	6	9	12	16	8	2
Proportion who own a car less than four years old (early 1954)	35	19	51	38	52	39	40	12
<i>Television</i> Proportion of spending units owning a television set (early 1954)	48	18	49	62	65	56	51	27

* Source: *Consumer Behavior*, Volume II, "The Life Cycle and Consumer Behavior," New York: Edited by Lincoln H. Clark, New York University Press, 1955, Table 9, p. 42.

¹ For ownership of homes the proportions shown are based on nonfarm spending units only.

TABLE 30.* FINANCIAL ASSETS WITHIN INCOME GROUPS, EARLY 1957

(Percentage distribution of spending units)

Type and Size of Holding	All Spending Units	1956 Money Income Before Taxes							
		Under \$1,000	\$1,000- \$1,999	\$2,000- \$2,999	\$3,000- \$3,399	\$4,000- \$4,999	\$5,000- \$7,499	\$7,500- \$9,999	\$10,000 and Over
Total financial assets ¹									
Zero	24	55	46	34	32	19	10	3	(2)
\$1-\$199	17	8	14	20	19	27	19	11	2
\$200-\$499	13	12	8	12	17	14	17	15	5
\$500-\$999	11	6	8	10	8	12	15	17	8
\$1,000-\$1,999	10	3	8	8	9	9	14	11	14
\$2,000-\$4,999	12	10	9	8	8	10	14	23	16
\$5,000-\$9,999	5	3	3	4	3	5	6	12	10
\$10,000-\$24,999	4	2	3	2	2	3	3	4	17
\$25,000 and over	3	(2)	(2)	1	1	1	1	2	23
Not ascertained	1	1	1	1	1	(2)	1	2	5
All cases	100	100	100	100	100	100	100	100	100
Number of cases	3,041	224	310	325	352	395	761	327	347

* Source: "The Financial Positions of Consumers," Federal Reserve Bulletin, Board of Governors of Federal Reserve System: August, 1957, Supplementary Table 6, p. 894.

¹ Includes marketable U. S. Government bonds and corporate, State, and local government bonds, as well as items shown separately.

* No cases reported or less than one-half of 1 percent.

TABLE 31.* INVESTMENT PREFERENCE WITHIN INCOME GROUPS

(Percentage distribution of spending units)

	Spending Units with Incomes of \$3,000 and Over			Money Income Before Taxes in Preceding Year							
				\$3,000-\$4,999			\$5,000-\$7,499			\$7,500 and Over	
	1957	1954	1952	1957	1954	1952	1957	1954	1952	1957	1952
Assets of fixed value											
Savings accounts	25	22	16	32	24	17	23	23	16	19	14
Savings bonds	26	42	43	29	46	48	28	40	38	19	26
Savings accounts and savings bonds	7	9	6	7	10	6	8	11	7	5	4
Assets of fluctuating value											
Common stock	10	7	8	5	3	6	10	8	8	18	19
Real estate	12	8	17	9	7	14	13	8	20	15	20
Common stock and real estate	2	1	1	1	1	(2)	2	1	2	4	6
Combination of fixed and fluctuating items listed											
Assets not listed	10	8	5	5	5	4	10	7	6	15	8
Not ascertained	3	1	1	3	1	(2)	3	1	2	4	1
	5	2	3	9	3	5	3	1	1	1	2
All cases	100	100	100	100	100	100	100	100	100	100	100
Number of cases	2,182	2,029	1,729	747	912	906	761	670	490	674	333

* Source: "The Financial Positions of Consumers," Federal Reserve Bulletin, Board of Governors of Federal Reserve System: August, 1957, Supplementary Table 11, p. 898.

¹ In 1957 the following question was asked of spending units with incomes of \$3,000 and over: "Suppose a man has some money over and above what he needs for his expenses. What do you think would be the best thing for him to do with it nowadays—put it in a savings account, buy Government bonds with it, invest it in real estate, or buy common stock, or what?" Similar questions were asked in other years.

² No cases reported or less than one-half of 1 percent.

TABLE 32.* LIFE-INSURANCE PREMIUMS WITHIN INCOME AND AGE GROUPS, 1956¹

(Percentage distribution of spending units within groups)

Income and Age	All Spending Units	Does Not Own Policy	Owns Policy	Amount of Premium Payment							Not Ascer-tained
				Zero	\$1-\$49	\$50-\$99	\$100-\$199	\$200-\$499	\$500-\$999	\$1,000 and Over	
All spending units ²	100	21	79	6	14	16	20	16	3	2	2
1956 money income before taxes											
Under \$1,000	100	57	43	7	15	11	4	1	1	(3)	4
\$1,000-\$1,999	100	47	53	6	25	15	4	2	(3)	(3)	1
\$2,000-\$2,999	100	33	67	5	23	17	11	6	(3)	(3)	5
\$3,000-\$3,999	100	19	81	10	16	23	20	10	1	(3)	1
\$4,000-\$4,999	100	9	91	5	16	24	27	15	(3)	(3)	4
\$5,000-\$7,499	100	7	93	5	6	17	33	27	3	1	1
\$7,500-\$9,999	100	3	97	2	7	8	28	41	6	2	3
\$10,000 and over	100	4	96	4	3	9	18	26	17	18	1
Age of head of spending unit											
18-24	100	31	69	9	21	20	14	3	(3)	1	1
25-34	100	12	88	4	13	18	27	20	2	1	3
35-44	100	14	86	2	9	15	25	25	5	3	2
45-54	100	15	85	3	12	17	21	20	5	4	3
55-64	100	19	81	9	14	18	20	13	3	2	2
65 and over	100	44	56	10	18	12	7	6	1	(3)	2

* Source: "The Financial Positions of Consumers," Federal Reserve Bulletin, Board of Governors of Federal Reserve System: August, 1957, Supplementary Table 12, p. 898. [Total number of cases not given; assumed to be 3,041.]

¹ Ownership at time of interview and payments during 1956.

² Includes cases in which age of head was not ascertained.

³ No cases reported or less than one-half of 1 percent.

TABLE 33.* PERSONAL DEBT OF SPENDING UNITS WITHIN INCOME AND AGE GROUPS, EARLY 1957
(Percentage distribution of spending units)

Income and Age	Number of Cases	All Cases	No Debt	Some Debt	Amount of Personal Debt ¹						Not Ascer- tained
					\$1- \$99	\$100- \$199	\$200- \$499	\$500- \$999	\$1,000 and Over		
All spending units ² 1956 money income before taxes	3,041	100	42	58	9	6	12	11	16	4	
	224	100	71	29	10	5	7	4	2	1	
	310	100	56	44	14	6	11	6	4	3	
	325	100	45	55	10	9	15	10	6	5	
	352	100	35	65	10	6	14	16	14	5	
	395	100	31	69	10	5	17	15	17	5	
	761	100	32	68	5	6	15	13	26	3	
	327	100	30	70	8	4	12	12	31	3	
	347	100	53	47	4	2	5	8	22	6	
	Age of head of spending unit	271	100	39	61	9	7	13	13	16	3
600		100	24	76	8	6	17	16	25	4	
686		100	29	71	9	7	13	13	23	6	
586		100	40	60	8	5	14	13	16	4	
433		100	59	41	10	5	11	6	7	2	
420		100	75	25	10	3	4	2	2	4	

* Source: "The Financial Positions of Consumers," Federal Reserve Bulletin, Board of Governors of Federal Reserve System; August, 1957, Supplementary Table 13, p. 899.

¹ Included all short- and intermediate-term consumer debt other than charge accounts; excludes mortgage and business debt.

² Includes cases in which age of head of spending unit was not ascertained.

TABLE 34.* DISTRIBUTION OF CONSUMER DEBT, BY COMPONENTS, SELECTED YEARS

Component	(Percent)			
	1920	1929	1939	1955
Mortgage	41	43	49	62
Installment	8	10	18	23
Security	27	30	8	4
Other	23	17	25	11
Total	100	100	100	100

* Source: "Consumer Installment Credit: Growth and Import," Part I, Volume I, 1957, Board of Governors of the Federal Reserve System, Table 38, p. 150.

TABLE 35.* CONSUMER INCOME AND INSTALLMENT INDEBTEDNESS

Money Income Before Taxes in Preceding Year	Percentage Distribution of Spending Units			
	All Units		Units with Installment Debt	
	Early 1952	Early 1956	Early 1952	Early 1956
Under \$1,000	13	11	5	5
\$1,000-\$1,999	15	12	10	9
\$2,000-\$2,999	18	13	19	13
\$3,000-\$3,999	18	14	23	15
\$4,000-\$4,999	15	14	19	17
\$5,000-\$7,499	14	22	19	28
\$7,500-\$9,999	4	8	4	8
\$10,000 and over	3	6	1	5
All income groups	100	100	100	100

* Source: "Consumer Installment Credit: Growth and Import," Part I, Volume I, 1957, Board of Governors of the Federal Reserve System. First part of Table 28, page 90.

TABLE 36.* INSTALLMENT DEBT BY LIFE-CYCLE GROUPS¹
 (Percentage of spending units with installment debt)

Life Cycle	Some Installment Debt	
	Early 1952	Early 1956
All life-cycle groups	38	45
Single		
Age 18-44	28	40
Age 45 and over	12	16
Married		
Age 18-44		
No children under 18	50	56
Youngest child under 6	58	68
Youngest child 6 or over		58
Age 45 and over		
No children under 18	23	27
Children under 18	45	53

* Source: "Consumer Installment Credit: Growth and Import," Part I, Volume I, 1957, Board of Governors of the Federal Reserve System; Summary, Chapter 6. Supplementary Table L, p. 116.

¹ Single spending units include unmarried, widowed, separated, and divorced persons without children. Married spending units include only those in which both husband and wife are present. Age refers to head of spending unit.

A GUIDE TO SELF-EVALUATION AND IMPROVEMENT IN MANAGEMENT FOR HOMEMAKERS

Underline the phrases which most nearly characterize your abilities and qualities.

I. MANAGERIAL ABILITIES

A. Ability to Make Decisions

Ability	Low	Average	High
To see need for and make decisions.	Slow or reluctant to make decisions. Lack self-confidence. Sometimes make decisions on matters for which not qualified.	Make decisions based on reason, but they are not always sound or timely. Have confidence, but sometimes am overly confident.	Make timely decisions. Because of ability have self confidence and use it judiciously.

B. Ability to Plan (Planning)

To formulate goals	Unable to set up goals to be sought in solving problems from day to day.	Able to formulate aims for certain types of problems. Somewhat hazy in conceiving desired results.	Able to formulate clear-cut goals for problems to be solved. Can visualize results to be accomplished.
To plan possible ways of solving problems and reaching goals	Often not successful in finding solutions to problems. Unable to use knowledge in making plans. Have difficulty in making plans.	Able to find solutions for some types of problems. Do not easily apply knowledge in meeting new situations. Sometimes make complete plans, but not always.	Can solve most types of problems. Able to apply knowledge quickly in meeting situations that arise. Consistent in making workable plans.

C. Ability to Carry Out Plans and Evaluate Results (Controlling and Evaluating)

To use a plan	Have difficulty in using plans. Cannot see ways of adjusting plans. See a plan as an end in itself.	Try to use plans, but am not always successful. Usually able to adjust plans. Sometimes let a plan become an end instead of a means.	Able to use plans successfully. Can readily adjust plans as work goes forward. Realize the plan is a means to reach the goal or accomplish results.
To control	Have little control in carrying out plans. Unaware of available resources. Wasteful of resources. Make no attempt to use resources alternatively.	Try to use control in putting plan into action, but am not always successful. Aware of limitations of some types of resources. Usually conserve limited resources. Able to find ways of using some resources alternatively.	Have the power to control the means planned for while carrying out the plan. Realize limitations of resources. Conserve all resources as far as possible. Clever in devising ways of using resources alternatively.
To coordinate	See each responsibility in management as a separate unit rather than as part of a whole. Unable to bring parts of a plan into a harmonious whole.	Sometimes see relationships between various responsibilities in management. Usually able to bring parts of a plan into working harmony.	See each responsibility in management in its relation to living as a whole. Able to bring parts of a plan into a harmonious whole.
To direct	Unable to give clear directions. Am indefinite or likely to be unpleasant in manner.	Can give directions when not under pressure. Usually give clear directions in a pleasant manner.	Can give clear, concise directions in a pleasant manner, even when under pressure.

A GUIDE TO SELF-EVALUATION AND IMPROVEMENT IN MANAGEMENT FOR HOMEMAKERS (Cont.)

I-C. MANAGERIAL ABILITIES (Cont.)

Ability	Low	Average	High
To guide	Unable to see difference between guidance and directions. "Bossy."	Usually able to lead others to accomplishment. Sometimes "bossy."	Able to lead others in getting activities accomplished. Put emphasis on the person as well as the activity.
To evaluate plans and methods of work	Do not see value of reviewing and analyzing past activities and experiences. Unable to be objective. Tend to over-estimate self.	See some value in analyzing past activities and in judging results. Usually objective. Fairly honest in estimate of self.	See that valuation of past activities and experiences leads to improvement in the future. Objective in making analysis and judging results. Honest in estimate of self.

D. Other Abilities

To teach	Do not encourage family members to carry responsibilities. Not interested in development of family members. Generally uninformed.	Usually encourage members of the family to carry responsibilities. Often fail to provide means and incentives for development of family members. Have some types of information, but not all.	Encourage members of the family to carry responsibilities. Provide means and offer incentives for development of family members. Have a fund of information of many kinds.
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To energize	<p>Unable to inspire others to activity. Seldom express appreciation of good work. Exploit energies of family members and others.</p>	<p>Able to inspire others to some types of activity. Sometimes able to motivate others through appreciation of good work. Sometimes use energy of others in a selfish manner.</p>	<p>Able to inspire others to activity through enthusiasm and understanding. Motivate others through appreciation of good work. Realize limitations of energy of family members and others.</p>
To buy	<p>Seldom make plans before buying. Seldom inquire about quality, grades, standards, etc., before buying. Waste or overspend.</p>	<p>Usually make plans before buying. Sometimes inquire about quality, grades, standards, etc., before buying, but not always. Use money to fair advantage for family.</p>	<p>Make quite definite plans before buying. Investigate quality, grades, standards, etc., before buying. Use money to advantage for family.</p>
To work	<p>Have poor work habits. Not interested in contribution of skill to management. Dislike work.</p>	<p>Have fair work habits. Appreciate contribution of some types of skill to good management. Waste time and energy on some tasks. Like only certain kinds of work.</p>	<p>Have acquired efficient work habits. Appreciate contribution of skill to good management. Conserve time and energy. Enjoy work.</p>

A GUIDE TO SELF-EVALUATION AND IMPROVEMENT IN MANAGEMENT FOR HOMEMAKERS (Cont.)

	Low	Average	High
II. PERSONAL QUALITIES ASSOCIATED WITH MANAGEMENT			
Intelligence	Fail to sense problems of importance in family living. Unable to apply knowledge.	Sense certain types of situations more easily than others. Able to apply knowledge in meeting certain types of situations.	Have keen observation and an understanding of situations that call for group action. Able to apply knowledge gained from past experiences in meeting situations and solving problems.
Enthusiasm	Listless and indifferent.	Frequently listless. Interested in some activities.	Full of vitality. Interested in activities to be carried out.
Understanding of human nature	Unable to recognize individual differences and capacities of family members. Unable to help resolve conflicts. Lack confidence in members of family.	Usually able to recognize individual differences and capacities of family members. Sometimes allow unnecessary conflicts to arise by failure to sense reactions of individuals. Sometimes lack confidence in members of the family.	Recognize individual differences and capacities of family members. Able to foresee probable reactions of individuals to different personalities and situations. Have confidence in members of family.

Imagination	Unable to put recalled facts or ideas into new relations in planning and solving problems. Lack originality.	Able to visualize new relationships in some types of problems, but not all. Original in some aspects of home-making.	Readily visualize new relations of facts and ideas in planning and solving problems. Original and resourceful.
Judgment	Make erratic decisions. Impractical, prejudiced.	Usually make wise decisions. Sometimes just and fair.	Make wise decisions. Am usually unbiased.
Perseverance	Unwilling to face facts. Easily discouraged. Impatient. Give up quickly.	Usually willing to face facts. Not too easily discouraged. Usually patient. Sometimes willing to work to achieve goal.	Willing to face facts as they are. Not easily discouraged. Patient under most circumstances. Willing to work to achieve goals.
Adaptability	Adjust slowly to new situations. Upset by changes.	Usually willing to make adjustments to new situations. Sometimes flustered by sudden changes.	Adjust readily and willingly to new situations. Seldom upset by sudden changes.
Self-management	Lack self-control. Temperamental and unpredictable.	Usually have self-control. Sometimes emotional about situations.	Show self-control in majority of cases. Well balanced.

**AMORTIZATION SCHEDULE OF A 15-YEAR LOAN OF \$1,000 AT
4½ PERCENT, FOR THE FIRST AND LAST YEARS OF THE LOAN**

Month	Monthly Payment	Applied to Interest	Applied to Principal	Balance of Loan
First Year				
First	\$7.65	\$3.75	\$3.90	\$996.10
Second	"	3.74	3.91	992.19
Third	"	3.72	3.93	988.26
Fourth	"	3.71	3.94	984.32
Fifth	"	3.69	3.96	980.36
Sixth	"	3.68	3.97	976.39
Seventh	"	3.66	3.99	972.40
Eighth	"	3.65	4.00	968.40
Ninth	"	3.63	4.02	964.38
Tenth	"	3.62	4.03	960.35
Eleventh	"	3.60	4.05	956.30
Twelfth	"	3.59	4.06	952.24
Fifteenth Year				
First	\$7.65	\$0.34	\$7.31	\$82.30
Second	"	.31	7.34	74.96
Third	"	.28	7.37	67.59
Fourth	"	.25	7.40	60.19
Fifth	"	.23	7.42	52.77
Sixth	"	.20	7.45	45.32
Seventh	"	.17	7.48	37.84
Eighth	"	.14	7.51	30.33
Ninth	"	.11	7.54	22.79
Tenth	"	.09	7.56	15.23
Eleventh	"	.06	7.59	7.64
Twelfth	\$7.67	.03	7.64	0.00

**MONTHLY PAYMENTS TO AMORTIZE A \$1,000 LOAN WITH
INTEREST RATE AT 4, 4½ AND 5 PERCENT**

Term of Years	4 percent	4½ percent	5 percent
5	\$18.42	\$18.62	\$18.87
10	10.12	10.36	10.61
15	7.40	7.65	7.91
20	6.06	6.33	6.60

CHECK SHEET FOR COMMUNITY HEALTH SURVEY •

Extension Service
Iowa State College

Community_____

Tomorrow's Community
Check Sheet No. 5 †

Date, 1st Scoring_____

Date, 2nd Scoring_____

HEALTH

This check sheet can be used in two ways:

1. For discussion groups and high-school or junior-college classes it provides a study outline.
2. For community planning committees it provides an instrument with which (a) local community problems can be diagnosed, (b) needs defined, and (c) new programs initiated.

	First Score †	Change §
A. Health organization		
1. The community is participating in a county or district health unit program, which is coordinated with state and national health programs to yield "parity between health protection for rural and urban residents"	_____	_____
2. Health consciousness is developed through publicity and the work of local groups so that public opinion supports isolation measures and other health regulations	_____	_____
3. The community participates in an organized program for the control of tuberculosis	_____	_____
4. A health library including the State Department of Health's "shelf of health literature" is maintained in the high-school or community library	_____	_____
5. All births and deaths are registered in accordance with state law and records are used in community health projects	_____	_____
6. Nurse and hospital facilities are available at reasonable cost	_____	_____
7. Competent medical service is available to all persons in the community	_____	_____

* Permission of W. H. Stacy, Assistant Professor of Rural Sociology, Extension Service, Iowa State College, Ames, Iowa.

† Ten Tomorrow's Community check sheets are available. These include outlines for considering (1) Government, (2) Education, (3) Religious Life, (4) Recreation, (5) Health, (6) Home Activities, (7) Farm Industry, (8) Trade Services, (9) Conservation, and (10) Community Organization.

‡ Code for scoring: A = perfect, or more than 95 percent of all that could be desired; B = good, or 86 to 95 percent satisfactory; C = fair, or 76 to 85 percent satisfactory; D = poor, or 50 to 75 percent satisfactory; E = less than 50 percent satisfactory.

§ In second scoring indicate changes during the interim: + = improved; 0 = same, no change; - = declined.

CHECK SHEET FOR COMMUNITY HEALTH SURVEY (Cont.)

	First Score †	Change §
8. Majority of adults consult doctor annually for health examination	_____	_____
B. Sanitation		
1. All public buildings, churches, schools, and recreation halls are regularly cleaned, well ventilated, screened, and free from pests	_____	_____
2. Homes are kept well screened and free from accumulations of rubbish that may produce undesirable odors and breed insects and pests	_____	_____
3. Town has satisfactory garbage- and sewage-disposal systems	_____	_____
4. Public water supply is adequate and frequent tests show it to be bacteriologically safe	_____	_____
5. Private wells are located and constructed to assure clean water supply for homes	_____	_____
6. During the past year there have been no cases of typhoid fever (commonly carried by water, milk, sewage or infected foods)	_____	_____
7. Hogs are being raised under sanitary precautions to prevent ascaris (roundworm) and trichina infection	_____	_____
8. Precautions are taken, through education, for the prevention of undulant fever in man through the handling of hogs, cows, or other animals affected with brucella infection	_____	_____
C. Food supply		
1. Milk supplied by commercial dairies is clean and pasteurized	_____	_____
2. Cows in all dairy herds are tested for tuberculosis and Bang's disease. Individuals and concerns handling milk comply with other health regulations	_____	_____
3. Milk is available and is used in sufficient quantities by young and old	_____	_____
4. Fruit and vegetables (fresh or canned) are generally available throughout all seasons. Gardens are ample to provide vegetables for fresh use and for canning and storing	_____	_____
5. Places where foods are prepared and served to the public are inspected and kept in sanitary condition	_____	_____
D. Prenatal care		
1. Community facilities for prenatal instruction are available to all women of the community by (a) medical		

† Code for scoring: A = perfect, or more than 95 percent of all that could be desired; B = good, or 86 to 95 percent satisfactory; C = fair, or 76 to 85 percent satisfactory; D = poor, or 50 to 75 percent satisfactory; E = less than 50 percent satisfactory.

§ In second scoring indicate changes during the interim: + = improved; 0 = same, no change; - = declined.

CHECK SHEET FOR COMMUNITY HEALTH SURVEY (Cont.)

	First Score ‡	Change §
organization, (b) visiting nurse, (c) adult health education classes or (d) programs of women's organizations	_____	_____
E. Infant and preschool child care		
1. Community provisions are made for assistance to mothers in the care of infants and preschool children, such as (a) state or medical organization clinics, (b) visiting nurse, (c) adult health education classes, or (d) programs of women's organizations	_____	_____
2. Children are given physical examinations before they enter school	_____	_____
3. Children are immunized against smallpox and diphtheria before entering school	_____	_____
F. School health		
1. All school buildings and grounds are inspected at least annually by a trained and sanitary inspector (checking the sanitary equipment, including water supply, sewage-disposal and hand-washing facilities, classroom equipment and furnishings, including lights, window shades, blackboards, walls, floors, ceilings, ventilation, temperature regulation and desks)	_____	_____
2. Community employs a school or other nurse to help with inspections and physical examinations and assist in maintaining high health standards among the children	_____	_____
3. Physician employed part-time or on other basis by the school who by physical examinations and other practical means helps maintain high health standards in the school	_____	_____
4. School teachers have annual physical examination. School teachers practice health habits and set healthful examples to the children	_____	_____
5. Teachers in elementary schools are qualified by training to teach authentic health information and conduct health education programs each week	_____	_____
6. High school provides for all students such courses as:		
a. Health education	_____	_____
b. Hygiene	_____	_____
c. Home nursing (for girls)	_____	_____
d. Infant care (for girls)	_____	_____
e. Prenatal care (for girls)	_____	_____
f. First aid	_____	_____

‡ Code for scoring: A = perfect, or more than 95 percent of all that could be desired; B = good, or 86 to 95 percent satisfactory; C = fair, or 76 to 85 percent satisfactory; D = poor, or 50 to 75 percent satisfactory; E = less than 50 percent satisfactory.

§ In second scoring indicate changes during the interim: + = improved; 0 = same, no change; - = declined.

CHECK SHEET FOR COMMUNITY HEALTH SURVEY (Cont.)

	First Score ‡	Change §
7. Classes in health education are available for adults	_____	_____
8. School children are immunized against diphtheria and smallpox	_____	_____
G. Health programs of organizations		
1. 4-H Clubs emphasize health:		
a. 4-H girls include in their program posture training, first aid, accident prevention, proper nutrition, health examinations, and good health habits	_____	_____
b. 4-H boys include in their program first aid, accident prevention, health examinations, and good health habits	_____	_____
2. Boy Scouts and Camp Fire Girls provide first aid, health examinations, and health habits programs	_____	_____
3. American Legion and Legion Auxiliary sponsor safety and better health projects	_____	_____
4. Red Cross quotas are met and public is acquainted with Red Cross program	_____	_____
5. Organizations are making effective use of available resources and cooperate with each other in developing health projects	_____	_____

Summaries

Number of items of each Grade: A _____ B _____ C _____ D _____ E _____

Members of scoring committee: _____

Activities recommended by scoring committee: _____

Activities adopted by community council: _____

Changes noted in second scoring: Improved _____

No change _____ Declined _____

‡ Code for scoring: A = perfect, or more than 95 percent of all that could be desired; B = good, or 86 to 95 percent satisfactory; C = fair, or 76 to 85 percent satisfactory; D = poor, or 50 to 75 percent satisfactory; E = less than 50 percent satisfactory.

§ In second scoring indicate changes during the interim: + = improved; 0 = same, no change; - = declined.

Index

- Abilities, a human resource, 37-38, 44
 acquired and native, 37
 developing and using family, 468
 managerial, 39, 47, 57, 60-61, 71
- Account process, 321-322
 account forms, 324-325
 account systems, 323-327
- Accounting system, 322-323
 adequacy, 322-323
 convenience, 322-323
 criteria for evaluating, 322-323
 flexibility, 322-323
 simplicity, 322
 systems in current use, 323-326
- Accounts, 321-325
 account keeping, 321
 household, 314, 319-325
- Activity and work plans, 116-124, 128, 152-153
- Adams, Charlotte, 124, 125
- Adams, S., 180
- Adaptability, 51-52
- Administration of the home, 11
- Ambition, 23
- American Heart Association, 192
- Amortization Schedule, 530
- Anderson, A. G., 151
- Anderson, John E., 21
- Anderson, Odin W., 493
- Andrews, Benjamin R., 210
- Architect's Home Plan Institute, 369
- Armstrong, Janet, 167, 169
- Art, 23, 26
- Asp, Elaine, 455
- Association of State Insurance Commissioners, 267
- Attitudes, a human resource, 14-15, 19-21, 24-25, 37-38, 76
 defined, 19
 development of, 2, 4, 26
 relation to philosophy, 21
 role in realization of values, 26-27
 sets of, 20
- Attitudes toward discipline, 77-78
- Attitudinal patterns, 22
- Authoritarianism, 79
- Authority in the home, 77-79
 external and internal, 78-79
- Automobile, costs of, 443
- Baber, Ray, E., 1
- Bane, Lita, 139
- Bank account, management of, 327-331
- Baragar, Arnold, 51, 415
- Barott, H. G., 133
- Bartley, S. Howard, 146, 147, 149
- Batten, Barton, Durstine, and Osborn, Inc., 502
- Beard, Mary R., 95
- Beasley, Christine, 77
- Beatty, Charlotte A., 183
- Becker, Howard, 430
- Benedict, F. G., 132, 133
- Bennett, Henry Eastman, 181, 186
- Beyer, Glenn H., 359
- Beyer, Wilma, 139
- Bielawski, John G., 192
- Bigelow, Howard F., 288
- Blaisdell, Richard S., 86
- Bloom, Clarice E., 163
- Board of Governors, Federal Reserve System, 250, 309

- Bogart, Leo, 111, 503
 Bonde, Ruth, 226
 Bonds, 250, 253, 294
 Book, W. F., 197, 198
 Boring, Edwin G., 204
 Bratton, Esther C., 135-137, 144-145, 152, 181
 Breckenridge, Marian E., 451
 Brenan, Charlotte W., 424
 Bricker, Harry, 498, 503
 Brown, Alvin, 40
 Bryan, W. L., 197
 Budgets, 226-227
 Heller committee, 236, 336-337, 410, 436, 439, 454, 477, 492, 509
 household expenditure surveys, 509, 512-517
 quantity and cost, 509
 salaried worker, 509
 wage earner, 509
 Building family life, 3-4
 Built-in ovens, 386-387
 Bureau of Home Economics, 102, 104, 111-112
 Burtt, H. E., 144, 151, 179-180
 Buying a lot and building a house, 345
 Buying a new house, 343-344
 Buying an existing house, 344-345

 Capital fund and income relationships, 243-248
 Capital fund, family, 242-248
 analysis of, 242
 creating, 242
 defined, 242
 relationship between income and, 243-248
 Carter, Deane G., 362
 Cederquist, Dena, 450
 Chave, E. J., 19
 Children, acquisition of homemaking skills, 196
 effect on furnishing needs of family, 334-335
 effect on homemaker's use of time, 101-102
 effect on housing needs, 334-335
 influence upon income use, 223-225
 planning for recreation, 506-508
 Children, share in handling money, 233-234
 sharing responsibilities and work of home, 12, 430-432
 stages in family life cycle with children, 5-8
 training for clothing selection, 474-475
 use of family car, 444-446
 Children in modern home, 85
 Chisholm, Dr. Brock, 483
 Choice-making, 25, 28
 Chute, Eloise, 147
 Ciocco, Antonia, 495
 Clark, Faith, 450, 455
 Clark, Lincoln H., 513, 517
 Clark, M. Ruth, 117
 Clothing management, 466-482
 family responsibilities in, 467-468
 objectives of, 466-467
 Clothing the family, 467-468, 471-476
 individual problems, 471-474
 group problems, 475-476
 money cost, 476-478, 509
 Clothing the family, human relation problems, 471-476
 adjusting to individual differences, 471-474
 group problems and considerations, 475-476
 training children in clothing management, 474-475
 Clothing the family, technical problems, 478-482
 availability of equipment and space, 479
 development of skills, 479-480
 knowledge of fabrics, 478-479
 Clothing selection and care, 480-482
 building a wardrobe, 480-481
 care of clothing, 481-482
 cost of care, 481
 management in, 480-482
 purposes of plan, 480-481
 Cohen, Jerome B., 239, 256, 280, 356
 Coit, Elizabeth, 343
 Colean, Miles L., 357
 Combining homemaking and job, 86-87, 91

- Comfort, 23, 27**
Commercial agencies, 430-434
 appliance servicing, 435
 dry cleaning, 434
 laundry services, 434
Commercial bank credit, 291, 296-297
Commercially prepared foods, 108, 456-457
Community facilities, a family resource, 37-38
Comparative shopping, 420
Condé Nast Publications, Inc., 367
Consumer attitudes toward credit, 309
Consumer credit, 285, 291, 295-311
 cost of, 287, 310-311
 limitations in use of, 289-290
 superstructure of, 289-290
Consumer credit, sources of, 295
 commercial bank, 291, 296-297
 industrial bank, 297-298
 life insurance policy loans, 283, 298
 personal and family loans, 297, 301
 personal finance company, 299
 small loan company, 299
Consumers' Guide, 294, 309
Consumers' Research, 420
Consumers' Union, 420
Controlling in management, 36, 41-43, 61-62
 see also Management process
Coordinating in management, 41, 62
 see also Management process
Cowles, May L., 109, 111
Crandall, Elizabeth Walbert, 32, 117, 203
Creative avocational experience, 8
Credit at stores, 301-308
 charge accounts, 301-303
 cost of installment, 304-308, 310-311
 installment, 303-304
 installment buying, 308-309
 installment purchase, 305-306
Credit, basis of, 287-289
 borrowing, 284-286
 budget payment plan, 306-308
 credit load in borrowing, 285
 guides to the use of, 290-291
 kinds of credit, 291
 limitation in use of, 289-290
Credit, questions of: how much, when, what extent, 308-309
 use of, 286, 289-291
Credit in family finance, 284-311
Credit instruments, legal, 292-299
 bond, 294
 chattel mortgage, 294-295
 collateral note, 292-293, 296-297
 installment sales contract, 293-297
 promissory note, 292-293, 296-297
 real-estate mortgage, 294
Credit Unions, 300-301
Crises and disasters, impact on families, 92-94
 role of management in, 92-94
Crowden, G. P., 142, 144
Cushman, Ella M., 407
Cutler, Virginia F., 359

Davis, Jean, 109
Decision-making, 11, 25, 28-30, 35-36, 40, 42-44, 60, 83, 91, 179-180, 214
 deliberation in, 28-29
 in a family, 28-30
 in management, 25
 process of, 25-31
 steps in, 29
 value judgments in, 25, 28-30
Decision-making activities, 43-44
Demand deposits, 240
Democracy in the home, 77, 84-85
Development of skills, 8
Dewey, John, 22, 28-29
Dewhurst, J. Frederick, 489, 493, 499
Dietz, Ruth P., 109, 111
Directing and guiding in management, 41-42, 62
 see also Management process
Direction-giving, techniques to use in, 433-444
Discipline, 77-79
Dispersion of family members, 80-81
Dividends, 250
Donaldson, Elvin F., 248, 262, 270
Dorsey, Jean Muir, 424
Dorsey, John, 371
Dorsey, Marguerite, 371
Dovetailing in food management, 457, 461-464

- Dovetailing, definition of, 461
 examples of, 462-463
 in meal planning, 461-462
 in preparation, 461-463
 in purchasing, 461-462
 in service, 463
- Dovetailing in other activities, 462-464
 in family hospitality, 464
 in integrating other operations, 463-464
see also Food management
- Dovetailing in time and activity plans, 118
- Duvall, Evelyn Millis, 78, 430
- Eastvold, Helen, 218
- Edgren, H. D., 507
- Eisenhower, Dwight D., 483
- Eliot, Thomas D., 92
- Emergencies, 118, 126
- Emergency fund, 241-242
- Employed homemaker, 101, 103, 106-108, 113
- Employment outside the home, 85-87, 88-90
 demand for women in industry, 85-87
 number of working women, 87
 work in lives of women, 88-90
 working wives, 89-91
- Energy, a human resource, 128
 amount available, 128, 153
 demands throughout family life cycle, 129
 plans for use of, 128, 146, 152
 ways of conserving, 153
 work simplification, *see* Work simplification
- Energy cost studies of homemaking activities, 130-138
- Energy costs of homemaking activities, 129, 132-138, 152
- Energy expenditures, measurement of, 130
 fatigue and, 139
 in different forms of activity, 130-132
 in homemaking activities, 132-138
 of different motions used, 135
- Energy expenditures, tasks requiring greatest, 138-139
 types of effort used, 129-130, 139
- Energy management, 128-154
 control in carrying out activity plans, 128, 152-153
 evaluation in, 128, 153
 fatigue and, 128, 139-140
 goals of, 128, 153
 influence of stages in family life cycle on, 129
 motivation and, 150
 plans for effective use of, 116-124, 128, 152-153
 relation of time and, 126, 128, 152
 work simplification, *see* Work simplification
- Energy pattern, 151
- Energy-saving kitchen, 192
- Energy-spending patterns, 129-130, 153-154
- Enthusiasm, 49-50
- Equipment, lists of necessary, 412-419
 cleaning, 419
 dinnerware, 417-418
 household linen, 419
 kitchen utensils, 413-416
 large kitchen, 417
 laundry, 417
- Equipment, planning for, 412-422
 buying plan for, 412
 costs, 410-411
 guide for buying paring knife, 426-427
 information on, 419-422
 informative labels, 420
 relation to time and energy, 422
 sources of information, 420
 values wanted in choosing, 410
- Estates, 239, 260-263
- Essentials of an Adequate Diet, 451
- Evaluation in management, 38-39, 42-44
 defined, 42
 role of, 42-43
see also Management process
- Evaluation of home management, 57-71
- Everett, Esther, 158, 168

Ewing, Oscar R., 485-487

Eyres, Ruth, 164

Family automobile, management of, 438-447

an operating expense, 435

annual budgets for two income groups, 439

annual costs of owning, 443

controlling operating costs, 442

financing costs, 439-441

human relationships and, 444-446

insurance costs, 443-444

management of costs, 438-444

management of problems, 444

✓ ownership at different stages of family life cycle, 438

planning budget for, 440

time and work patterns and, 446-447

Family Health management, 483-498
see also Health management

Family in the community, 13-15, 94-96

attitudes toward responsibilities of, 14

participation in local and world affairs, 2, 13-15, 94-96

social action, 14

social justice, 14

Family Life Conference, 5

Family life cycle, stages in, 4-8

accumulation, 6

adjustment, 5

college, 7

grade-school, 6

high-school, 7

recovery, 7

retirement, 8

work-life of women in relation to, 89

Family life in changing world, 72-97

Family of today, 87-90

role of, 74-76

Family resources affecting clothing management, 468-471

Family resources, human, abilities and skills, 37-38, 44

attitudes, 14, 15, 37-38

Family resources, energy, 37-38

knowledge, 37-38, 44

Family resources, nonhuman, community facilities, 37-39

goods and services, 37-38

money, 37-38

time, 37-38

Farmer, E., 180

Farnham, Mary B., 192

Fatigue, attitudes and, 140, 147

causes of, 139-140, 147-149

definition of, 141, 146

effects of, 128, 140-147

forms of, 140-150

most tiring period of day, 118

motivation and, 150, 153

of young homemakers, 147-149

recovery from, 141-142, 150-151

rest periods to relieve, 150-152

studies of effects of, 139-140

Fatigue curves, 142-146

Fatigue patterns, 139, 142-143, 149

Fatigue, physiological, effects of, 141-146

curves of recovery from, 151

recovery from, 141, 150

rest periods to relieve, 150-152

studies of, 143-145, 151

Fatigue, psychological, effects of, 141, 146-149

boredom, 147

frustration, 147-150

studies of, 147-149

Fatigue studies of homemaking tasks, 139-140

Federal Reserve Bulletin, 3, 338, 411, 510-511, 518-523

Feeding the family, 448-465

Feldman, Frances Lomas, 88, 339

Feldmiller, Ilajean, 163

Finance management, family, 208-332
credit, 284-311

financial records, 312-332

life insurance, 265-283

managing family income, 208-237

savings and investments, 239-264

Financial records in family finance, 312-332

Financial records in family finance, account forms, 324-325
 account keepers, notes to, 327
 account keeping, 321-322
 account process, 321-322
 advantage of keeping, 312-313
 balance sheet, 313, 317-320
 household accounts, 314, 319-320
 ledger accounts, 313-317
 long-time records, 313-317
 net-worth sheet, 313, 317-319
 records that aid in family finance, 313-314
 short-time records, 314
 Fincher, Lillian J., 415
 Fitzsimmons, Cleo, 167
 Flewelling, Ralph Tyler, 22
 Food, commercially prepared, 108
 Food for the family, controlling time and energy in preparing, 458-464
 buying habits, 454
 time and cost studies of prepared mixes, 455-457
 time use studies, 455
 use of freezer, 464
 Food management, 448-465
 attitude toward food responsibility, 458-459
 buying habits, 454
 building food habits, 450-451
 dovetailing in, 457-464
 food preparation and, 455-458
 goals in feeding the family, 449
 knowledge of nutrition, 449
 major activities, 448
 meal planning, 452-453
 mental flexibility in, 459-461
 money costs of feeding family, 453-455, 509
 solution of problems, 449
 use of commercial mixes and, 449
 Food planning, 450-453
 daily food plans, 451-452
 guide in making daily food plans, 453
 planned shopping, 453
 planning meals, 452-453
 planning for nutrition, 451-452
 Ford, Mary E. N., 6

Foster, LeBaron R., 296
 Freeman, Ruth C., 209, 320
 Frost, Loraine, 181
 Furnishings and equipment, 406-427
 budgets for families of two income levels, 410, 509
 buying information on, 419-422
 costs of, 410-411
 evaluating time and energy costs in buying, 422-423
 family stages when costs are highest, 411
 final considerations before buying, 423
 management problems, 406
 planning for, 407-412
 resources available for, 406
 sources of consumer information on, 420
 studies of consumer use and purchase, 427
 values wanted in choosing, 409-410
 Furniture, planning for, 407-412
 alternate choices, 407
 guide to buying a chair, 424-426
 information on, 420-422
 long-time plans for buying, 412
 points to consider in buying, 407-409, 420-421
 problems of selection, 407-408
 studies of consumer buying practices, 408-410
 values considered in choosing, 408-410

Gairns, S., 133
 Gilbreth, Lillian, 186
 Girshick, Meyer A., 474
 Glaser, Samuel, 364
 Glick, Paul C., 87-89
 Goal consciousness, 153
 Goals, attainable, 2, 4, 32
 family, 32-33
 for homemaking, 31-33
 formulating, 31-33
 in family living, 4, 17-18, 20, 28, 31-33, 36, 38, 40, 48
 long-time, 32-33

- Goals, role of management in realization of, 33
 short-time, 31-32
- Goals, family, 100-101, 127
 individual, 100, 127
- Goble, Eva, 162-163, 167
- Good Housekeeping Magazine*, 366
- Goods and property, a family resource, 37-38
- Grady, Ethyl, 183
- Gray, Greta, 117
- Gross, Irma H., 32, 109-110, 112, 117, 140, 148, 158, 168, 203, 431, 489
- Growth and development of family members, 2, 4, 8
- Guide to evaluation of management, 57-71
- Guthrie, Mary E., 480
- Habit patterns of management, 48
- Habits, decision-making and, 178-179
 manipulation, 198-199
 mental, 198-199
 posture, 181
 problems of changing, 176
 work, 202
 work simplification and, 176
- Hanson, Arthur W., 239, 256, 280, 335-336
- Harley, D. L., 500
- Hart, Ella B., 32
- Harter, N., 197
- Hazard, John W., 273
- Hazelton, Helen W., 182
- Health, 22, 27, 32, 38, 483-498
 activities in the community, 496
 aging population, 495
 community health survey, 497, appendix, 531-534
 defined, 483
 dental care, 487
 goals, 484
 homemakers' responsibility, 484
 hospital integration, 487
 national programs, 485-487
 phases of, 484
- Health and illness, expenses of, 490-491, 509
 hospitalization for maternity, 486
- Health and illness, insurance types, 492-494
 mental illness and prevention, 490-491
- Health and preventive medicine, 486-491
 dental care, 487-488
 early diagnosis, 488
 immunization, 485, 487
 maternal and infant care, 486
 periodic check-ups, 489
 quarantine, 487
 research, 488
 sanitation, 487
- Health management through, atmosphere of home, 490
 nutrition, 449, 451-452
 planning preventive measures, 486-489
 public agencies, 484, 490
 sanitary codes and inspection, 485
- Heart Kitchen, 192
- Heller Committee for Research in Social Economics, 236, 336-337, 410, 436, 439, 454, 477, 492, 509
- Help, employed, 12, 430, 432-434
 employer and employee relationships, 432-433
 giving directions to, 433-434
 making plans for, 432
 family, 12, 430-432
- Help received in homemaking, by city
 homemakers, 104-106
 employed homemakers, 106
 farm homemakers, 104-106
- Heredity, 73
- Hill, Reuben, 78, 430
- Hinchcliff, Keith H., 362
- Hire-purchase plan, 293
- Hollingsworth, Helen, 493
- Home and family responsibilities, major, 2-15
 requirements for successful carrying of, 3
- Home, effect of change on, 76-77
 effect of changes in home production on, 82-83
 effect of industrialization on, 76-77, 79-84

- Home equipment, 412-423
- Home, financing a, 349-356
 - estimating amount family can spend, 349-350
 - estimating amount for down payment, 349
 - estimating annual and monthly cost during payment of loan, 350-351
 - estimating loan requirement, 349-351
 - estimating total amount that can be spent for, 352-353
 - financing agencies available to buyer, 355
 - obtaining and closing the loan, 355-356
 - title or deed to real estate, 357
- Home furnishings plan, 412
- Home in a changing world, 72-97
- Home management, 8-10, 36-56
 - blocks to quality, 48
 - defined, 35-36, 38
 - evaluation of, 43, 57-71
 - growth of, 47, 59-70
 - integrative role of, 37-38
 - quality of, 48
- Home manager, effective, 49
 - qualities of, 49-52
- Home ownership, a family goal, 340
 - costs of, 345
 - down payment, 345, 349
 - extra costs of, 345
 - guide for estimating initial costs, 348
 - mortgage costs, 350-351
 - preliminary costs, 345
- Home ownership and renting, factors for consideration, 340-342
- Home values, 359
- Homemakers, roles of, 109-110
- Homemaking, 18
- Homemaking activities, classified according to energy demands, 134, 138
 - considered most fatiguing, 138-140
 - energy cost studies of, 130-138
 - energy costs of, 132-138
 - energy demands on body, 138
 - fatigue costs of, 181
 - types of effort used in, 129-130, 139
- Homemaking activities, time costs of, 101-112
 - most time-consuming, 110, 112
- Homemaking responsibilities, mental approach to, 128
 - division of, 101
- Homemaking tasks, work simplification studies of, 155-176
- House, building a, 359-405
 - choosing location and lot, 359-361
 - selecting a builder or contractor, 403-404
 - selecting an architect, 402
 - selecting exterior design of, 399
 - selecting plans, 359, 378
 - specifications for building, 402
 - ways of controlling building costs, 401-402
- House, buying a lot and building a, 345
 - buying a new, 343-344
 - buying an existing, 344-345
 - check list for buyers and renters, 346-347
 - choosing a location, 360
 - choosing a lot, 361
 - points to check in buying a lot, 361
 - renting a, 340, 342
- House plans, activities to provide for in, 361-362
 - choosing desirable, 378
 - circulation between areas, 362-366
 - duo- or multi-purpose use of rooms, 372-374
 - flexibility in use of rooms, 364-374
 - guide for checking housing needs, 376-377
 - location of doors and windows, 379
 - planning arrangement of furniture, 381
 - relation of activity areas, 362
 - size of rooms, 380
 - studying and testing, 378-379
- House plans and specifications, obtaining, 402
 - architect's services, 402
 - ready-made plans, 402-403
 - specifications a part of completed plans, 403

- Household Finance Corporation, 354, 412, 441, 443-444, 478, 498
- Household management, 430-438
- Household storage, planning, 397-398
 dimensions of storage units, 400-401
 list of articles to be stored, 397
 planning how and where to store articles, 397
 study of space design for, 397-398, 400-401
- Housing budgets, 349-350
 for salaried worker, 335, 337-338
 for wage earner, 335-336, 338
- Housing costs, of an owned home, 335-336
 a rented home, 335, 336-337
- Housing design values, 359-360
- Housing for the handicapped, 192-193
- Housing management, 334-427
 objective, 335
- Housing needs of family, 334, 374-375
 guide for checking, 376-377
 in different stages of family life cycle, 334-335, 375
- Hoyt, Elizabeth, 84
- Human environment, 73
- Hunscher, Helen A., 450
- Imagination, 50-51
- Improving methods of work, 155, 176
 interest in, 176
 motion economy in, 181
 questions that lead to, 176
 value of, 155
- Improving working conditions, 176
- Income, kinds of, 211-214
 money, 211-212, 243-247
 psychic, 211, 213-214
 real, 211-213, 243-247, 286
- Income management, 208-237
 analysis of money income for short and long periods, 214-222
 effect of stages of family life cycle on, 222-225
 goals of, 208-209
 methods of handling money income, 226-235
 process of, 208
 quality of, 213-214
- Income management, steps in, 210-216
 synchronizing short-time and long-time income use, 225-226
- Income, methods of handling, 226-235
 allowance, 227-228, 234-235
 equal-salary, 228, 234-235
 evaluation chart of, 234-235
 family-finance plan, 226-227, 234-235
 fifty-fifty, 229, 234-235
 handout, 229-230, 234-235
- Income streams, 215-222
 profiles of annual incomes, 215-218
 profiles of life-time incomes, 219-222
- Income use, criteria for judging methods of, 230-234
 can children share, 233-234
 convenience, 234
 cost of living revealed, 230-231
 psychological effects, 231-232
 savings revealed, 232-233
- Incomes in United States, distribution and use, 235-236
- Incomes in United States, sources of information of the distribution and use of, 235-237
- Federal Reserve Monthly Bulletin, 236
 Appendix, 510-511, 518-523
- Heller Committee for Research, 236
 Appendix, 509
- Life* (periodical) Study, 236
 Appendix, 514-516
- Monthly Labor Review, 236
 Appendix, 512
- Industrial banks, 297-298
- Industrialization, 76-77, 79-81
- Informative labels, 420, 478
- ✓ Inheritance, man's, 72-74
 mental, 72-73
 physical, 17, 72-73
 social, 17, 72-73
- Installment credit, 293-309
 family use of, 303-304, 308-309
 interest rate, 305-307
 time payment plans, 306-308

- Installment purchase, 306-308
 - budget payment plan, 306-308
 - calculating interest rate, 305-306
 - constant-ratio formula, 306
- Intelligence, 49
- Interest rate, 240
- Interrelation of management, family values, goals, 37-38
- Investing family funds, 249-254
 - corporate securities, 249-250
 - evaluating an investment, 251-254
 - investment preferences, 250-251
 - life insurance, 242
 - long-time investments, 253
 - types of investments available, 249
- Investments for a family, tests of, 251-254
 - collateral values, 251-252
 - income yield, 248, 252-253
 - legality, 252
 - management and care required, 254
 - marketability, 253
 - rate of yield, 250
 - safety of principal, 248, 251-252
- Investments, information about, 254-255
 - Fitch Investors Service, 255
 - Moody's Investors Service, 255
 - Standard and Poor Corporation, 255
 - Standard Statistics, Inc., 255
- Johnson, A., 133
- Johnson, Helen L., 493
- Johnston, Betty Jane, 417
- Johnston, Kathleen, 138
- Judgment, 51
- Kiesler, Frederick, J., 131
- Kilpatrick, W. H., 76
- Kinds of credit, 285-311
 - investment, 291
 - commercial, 291, 296-297
 - consumer, 285, 295-311
- Kitchen, activities and work centers, 382-383
 - arrangement of equipment into work centers, 382-385
 - number of doors and windows, 383-387
- Kitchen, planning an efficient, 383-394
 - size and shape, 380, 383-385
 - testing efficiency of, 388
 - typical plans for, 384-385
- Kitchen arrangement studies, 168-171
- Kitchen arrangements, 383-385
 - broken U-shaped plan, 383-385
 - L-shaped plan, 383-385
 - one-wall plan, 383-385
 - separate-center plan, 385
 - two-wall plan, 383-385
 - U-shaped plan, 383-385
 - with built-in ovens, 386-387
- Kitchen design for wheelchair homemaker, 192
- Kitchen equipment, plans for buying, 417
 - guide to buying a paring knife, 426-427
 - studies of consumer practices in buying, 409-410
- Kitchen space needs, 173
 - heights and widths of working chair and stool, 175
 - heights of work surfaces, 174, 183
 - lighting of work surfaces, 188
 - width of work surface, 173, 183, 186
- Kitchen work centers, adequate storage in, 388
 - guide for planning cabinets to fit both worker and equipment in, 390-391
 - list of utensils to be stored at each of, 388-389
 - normal and maximum working areas of workers in, 178-179, 391
 - planning adequate storage and work space in, 388, 390-391
 - planning comfortable heights for working surfaces, 391
 - planning efficient arrangement of utensils and materials in, 388-390
 - planning storage arrangements, 388
 - space requirements of cabinets, 392-394
- Knowledge, a human resource, 23, 26, 37-38, 44

- Knowles, Elaine E., 135, 140, 147-148, 165, 391
- Koerth, Wilhelmine, 40
- Kuschke, Blanche, 415
- Kyrk, Hazel, 83, 231, 319
- Lanford, Caroline Sherman, 131
- Langfeld, Herbert S., 204
- Langworthy, C. F., 133
- Laundry, planning the, 394-397
 arrangement of equipment, 395
 location of, 394
 plans for room for, 396
 work space required, 395
- Laundry areas, study of, 395-396
- Lawrence, Philip S., 495
- Lawton, George, 8
- Learning a new task, 196-198
- Learning curve in typewriting, 197
 of a young man, 197
- Learning curve, plateau in, 197
 factors affecting appearance of, 197-198
- Ledger accounts, 313-317
 accounts payable, 316
 accounts receivable, 316
 assets, 314
 capital account, 315
 inventory of household and personal property, 317
 liability account, 315, 317
 life insurance account, 315
 mortgage-receivable account, 315
- Lee, Otis, 21
- Leerkamp, Marie, 160
- Leisure time, 100, 104, 106, 111, 113, 498
- Levels of consumption, 83-84
- Leverton, Ruth M., 450
- Life insurance, advantages of, 265
 choice of agent, 273
 comparative costs, 277-278
 purpose of, 265
 tests of, 272-273
- Life-insurance companies, types of, 269-272
 assessment, 270-271
 fraternal, 271-272
 legal reserve, 269
- Life-insurance companies, mutual, 269-270
 stock, 269-270
- Life-insurance estates, 281-282
- Life insurance in family finance, 265-283
- Life-insurance policy values, 276,
 face, 276, 278, 282
 loan, 283, 298
- Life insurance policies, 274-280
 annuity, 274, 278-279
 endowment, 274-276
 family income plan, 279
 government, 280
 limited payment, 274-275
 national, 280
 ordinary, 274
 pension bond, 276
 servicemen's indemnity and, 280
 term, 274, 276-277
 value of, 276, 278, 282-283, 298
- Life-insurance premiums, 266, 270, 283
- Life-insurance rates, 267
 mortality table, 268
- Life-insurance terms, glossary of, 282-283
- Life* (periodical), 167, 514-516
- Lindeman, Jean, 158
- Lindquist, Ruth, 9
- Living estate, 242
- Love, 23, 26
- Lynd, Robert S. and Helen M., 114
- Macbaney, Anna, 493
- Maier, Norman F., 150
- Management analysis, 2, 8-11, 35-54, 57, 60-63
 abilities, 47-48, 57, 60-63
 assumptions, 36
 concepts of, 2-3, 8-9, 11, 17-30
 contributions of, 35
 challenge of, 54
 definition of, 54
 habit patterns of, 48
 situations, 44-46
- Management applied in family living, 44-47
- Management cycle, 43
- Management in action, 43-44

Management in homemaking and family life, 2-97
 Management in modern home, 90-91
 Management in the home, evaluation of, 57-71
 managerial abilities of value in, 60-63
 personal qualities associated with, 67-70
 self-evaluation guide for homemakers, 526-529
 for students, 57-71
 techniques associated with, 63-66
 Management process, 39-43, 90-91
 controlling plan in action, 36, 41-43, 61-62
 coordinating, 41, 62
 decision-making factor, 40, 44
 directing, 41-42, 62
 evaluating results, 42-43, 63
 guiding, 41-42, 62
 planning, 36, 40-43, 60-61
 Managerial abilities, 39, 47, 57, 60-61, 71
 Managerial ability, 36, 57
 developing, 47, 71
 improvement curve, 47
 Managerial responsibilities, 9-11
 Managerial skills, 3, 12, 114
 Managing a bank account, 327-330
 check stub, 328
 checking account, 327-331
 checking bank statement, 328-330
 Managing family income, 208-237
 Managing housing, 334-358
 Manipulative skills, 12
 Manzer, C. W., 151
 Mason, Florence H., 424
 Mazur, Paul M., 293
 McCullough, Helen, 173, 175, 188, 192, 387-388, 390, 392-393, 395, 397, 400, 413, 418
 McCullough, Margaret Mildred, 233
 Meyers, C. S., 180
 Miles, G. H., 151
 Money, a family resource, 37-38, 44
 Monhaut, Gertrude, 167
 Monthly Labor Review, 512
 Moore, Bernice Milburn, 100-119

Morrison, Mary Helen Bradley, 456
 Mortgage loans, amortized, 350, 353
 costs of, 351-355
 FHA insured, 354-355
 life insurance with mortgage tie-in, 354-355
 open-end, 354
 package, 354
 straight, 353
 Morton, Grace Margaret, 480
 Mosso, A. P., 142-143
 Mother-teacher, 80
 Motion and time studies, 155-157
 applied to work problems, 157
 value of, 157
 Motion-mindedness, definition of, 155
 value of, 155, 192
 Mott, Frederick D., 486
 Mumford, Lewis, 22
 Mundel, Marvin E., 167, 170, 177
 Mundel classes, 177-191
 changes in body positions and motions, 177-183
 changes in finished product, 190
 changes in production sequence, 188-190
 change in raw materials, 190-191
 changes in working arrangements and equipment, 183-188
 Muse, Marianne, 102, 165-166, 169, 183, 187
 National Board of Fire Underwriters, 411
 National Conference on Family Life, 36-37, 48, 101
 National Manpower Council, 89-90
 National Recreation Association, 507
 National Underwriters, 272
 Nelson, Gladys M., 162
 Net worth, 313, 317-319
 assets and liabilities, 314, 316-317
 balance sheet, 313, 316-317
 calculation, 317-319
 net-worth sheet, 313
 New York Heart Association, 192
 New York Times Magazine, 421
 Nickell, Paulena, 365
 Nielsen Newscast, 503

- Nielsen Researcher, 503
 Noble, Isabel, 455
 Nolen, Russell M., 350-352, 356
 Northrup, Bell, 474
 Nutrition, 449, 451-452
- O'Brien, M. K., 133
 O'Brien, Ruth, 474
 Ogburn, W. F., 72, 77
 Old Age and Survivors Insurance, 255-257
 Operating the household, control of
 money costs, 436
 costs of, 435-436
 help in, 433-434
 problems of operation, 430
 protective insurance in, 437
 time and energy costs in, 437-438
 Overmanagement, 52-53
 Overstreet, H. A., 499
- Parker, DeWitt H., 21, 23
 Pattison, Arlean, 396
 Pattison, Mattie, 31
 Peak loads, 117-118, 121
 Perkins, Nellie L., 139
 Perseverance, 51
 Personal management, 44
 Personality building, 14
 Phillips, Velma, 472
 Philosophy, 2-4, 17-21
 growth of family's, 18-21
 growth of individual's, 19
 importance of, 18-19
 of family living, 2-4, 17
 Physical activities, 2, 11-13
 direction of, 11-13
 kinds of, 11-12
 Phipard, Esther F., 415
 Pickering, Ernest, 396
 Plan testing, 41
 Planning, decision-making in, 40
 effective habit patterns of, 41
 long-time, 118
 purpose of, 40
 relation to work, 12
 role in attaining goals, 40-41
 success in, 43-44
- Planning in management, 36, 38, 40-43
 definition of, 40
 role of decision-making and controlling in, 40-41
 see also Management process
 Plans, making and carrying out, 41-43
 see also Time and activity plans
 Play, 23, 27
 Pond, Esther, 380
 Posture, definition of good, 180
 effect of equipment on, 183-188
 efficient use of body, 182-183
 energy expenditure and, 182
 good sitting, 181
 good standing, 181
 good working, 182-185
 habits, 140, 181
 relation to equipment, 183-187
 relation to fatigue, 140, 181
 results of poor, 181
 use of most comfortable, 182
 Prevey, Esther E., 209
 Principles of guidance, 78-79
 Purposive activities, 57
- Radio, 100
 Ramsay, Edith, 387
 Recreation, 498-508
 community organizations, 506-507
 defined, 498
 family centered, 499-500
 judging television programs, 504
 management of, 501
 management of television problems, 502-503
 need for, 499, 507
 planning for, 504, 506
 shift in expenditures for, 504, 506
 Reid, Margaret, 293
 Religion, 23, 27
 Resources, family, 32, 37-39
 management of, 37-39, 42, 44-46, 449, 468
 planning use of, 33, 37-38
 using alternatively, 39, 46-47
 see also Family resources

- Rest periods, during work hours, effects of, 128, 150-151
 best time for, 151
 desirability of, 152
 length and number of, 150-151
 Rest periods for homemakers, 152
 time most needed, 152
 Retirement income, 265
 Rhythm, 179-180
 application in the home, 180
 decision-making and, 179-180
 economical aspects of, 179-180
 relation to fatigue, 180-181
 work simplification and, 180
 Rhythmical motions in work, 155
 Robbins, Florence Greenhoe, 501
 Roberts, Evelyn H., 175
 Roberts, W. H., 21, 23
 Rockwood, Lemo D., 6
 Roemer, Milton I., 486
 Roles in management in the home, 91
 homemaker role, 3
 husband-wife role, 3
 "we" role, 91
 work role, 91
 Rondileau, Adrian, 287
 Rosenberg, Max, 21
 Ruby, Carolyn, 480
 Russell, Marion, 182
 Russell Sage Uniform Small-Loan law, 299
 Ryan, Mildred Graves, 472
 Ryan, Thomas A., 147

 Savings, family, 239-242
 postal savings, 241-242
 preferred stock, 249-250
 reserve fund, 242-243
 savings account, 240-241
 savings bonds, 240
 Savings habit, 240, 242
 Savings program, planning, 239-240
 Salisbury, Frank Seely, 19
 Sanderson, Mrs. Frances G., 192
 Schneider, E. C., 142
 Schoepel, Martha S., 387
 Self-evaluation, 43, 57-71
 Self-management, 49, 52, 69
 Skattebal, Mary, 138
 Skilbeck, O., 151
 Skill, effort used in acquiring, 199-200
 manipulative, 12, 180, 196, 220
 manual, 196-197
 mental, 198-199
 stages of learning in acquiring, 200
 technical, 3, 12
 transference of, 203-204
 typewriting, 196, 198
 Skills, homemaking, acquisition of, 195-196, 200-203
 guiding rules in acquisition of, 204
 managerial, 3, 12, 114
 motivation in acquiring, 195-196
 stages of learning and effort in acquiring, 200-203
 Slavson, S. R., 500
 Sleep and rest, 100, 101
 Sleeper, Catherine, 357, 361, 381, 399
 Sleeper, Harold R., 357, 361, 381, 399
 Small-loan companies, 299
 Small-loan law, 299
 Smith, Patricia Cain, 147
 Smith, Stanley A., 380
 Social heritage, 72-73
 Social intelligence, need for, 96
 Social Security Act, 255-257
 benefits, 256-257
 Souder, M. Attie, 424
 Spengler, Oswald, 13
 Stacy, W. H., 531
Standard of living, 83-84
 Stanton, Hazel M., 40
 Starch, Daniel, 40
 Steele, Bess, 480
 Stephenson, A., 180
 Studley, Lucy, 9
 Successful family building, 4
 Successful homemaker, 49-54
 Swartz, V. W., 133-135, 137

 Table of mortality, 268
 Taxation, family financing for, 257-259
 federal income tax, 257-258
 general property taxes, 257-259
 income-tax payments, 258-259
 inheritance tax, 257, 262-263
 sales taxes, 257-258



- Taxation, social security tax, 257
 state income tax, 257-258
 tax obligations, 258-259
 Tead, Ordway, 50
 Technological environment, 35, 73-74
 Technology, rise of, 73-74
 Technology in homemaking, 13, 24
 role of, 13
 technological interest, 23, 24, 27
 Television, 100, 111, 502
 Thayer, Ruth, 175
 Thomas, Margaret, 166
 Thomson, M. K., 19
 Thurstone, L. L., 19
 Time, a family resource, 100, 127
 definition of, 100
 demands upon, 100-103, 116
 guides in evaluating use of, 102
 guides in planning use of, 102-103
 homemaker's use of, 102-113
 importance of, 100
 patterns of, 100
 planning use of, 114-124
 relation of energy to, 100
 Time and activity plans, 101, 114-126
 advantages of, 121, 125
 bases for family, 115-116
 building workable, 114-115, 118, 120, 125-127
 combining and grouping tasks in, 118
 daily and weekly, 115, 122-123
 decision-making in, 115, 122-123, 126
 distribution and sequence of activities in, 116, 118,
 123
 division of work in, 116, 118, 121, 123
 estimating time needed for different tasks, 118
 evaluation of, 127
 example of written, 124
 for employed homemakers, 124
 guides in making, 119
 help in carrying out, 116
 peak loads in, 117-118
 planning for emergencies, 118, 126
 rest periods in, 117
 skill in adjusting, 126
 special and seasonal tasks, 115, 120-123
 Time and activity plans, steps in making, 115-116, 120-123
 successful, 125, 127
 time and energy demands of tasks in, 115-116
 Time costs of homemaking activities, 101-112
 most time-consuming, 110-112
 Time management, 100-127
 carrying out time and activity plans, 110, 114
 controlling the plan in action, 124, 126-127
 developing skill in, 114, 126
 evaluation in, 120, 126-127
 goals of, 100, 126-127
 influence of stages in family life cycle on, 101-102
 plans for effective, 100, 114
 relation to energy management, 100
 role of the clock, calendar, radio, and television in, 100, 117-118
 work simplification, *see* Work simplification
 Time managers, types of, 114
 Time patterns of city homemakers in two socio-economic groups, 109-110
 comparison of, 110
 major roles shown in, 109-110
 Time patterns of farm, city and employed city homemakers, daily, 106-107
 weekly, 104, 109-110, 112-113
 Time-spending habits and practices, checking, 112
 Time spent in six major roles by two groups of city homeworkers for a week, 109, 110
 Time studies of homemaker's use of time, 102-112
 Time used by homemakers during a week in, care of clothes, 104, 107
 care of family, 104, 107
 care of house, 104, 107
 dishwashing, 104, 107
 eating meals, 104, 107
 farm and other work, 104, 106
 food preparation, 104, 107
 leisure activities, 104, 106
 marketing and records, 104, 107

- Time used by homemakers during a week in, paid employment, 106-108
 personal care, 104, 106
 sleeping and resting, 104, 106
 Time used in homemaking activities,
 by city homemakers, 103-107
 by employed city homemakers, 106-107
 by farm homemakers, 103-107
 changing patterns in, 112
 comparison of, 111
 trends in, 112
 Titus, H.H., 21
 Transportation management, 438-447
 Travell, J., 424
 Trends in modern life, 76-77
 Trusts, wills and estates, 259-263
 administrator, 261
 executor, 261
 executrix, 261
 federal estate tax, 263
 inheritances, 242
 joint tenancy, 262
 laws of administration, 261
 laws of descent, 261
 laws of distribution, 261
 legatee, 263
 right of survivorship, 262
 sole devisee, 261
 trust funds, 259-260
 wills, 260-261
 Tucker, James I., 52
 Tufts, James H., 22, 28, 29

 University of Illinois Small Homes Council, 350, 373, 399
 U. S. Bureau of the Census, 86
 U. S. Department of Labor, 86
 Women's Bureau, 433
 U. S. Government Bonds, 252-253

 Values, 4, 17, 21-29
 definition of, 21
 in decision making, 25, 28
 influence of attitudes, 24-25
 intrinsic and instrumental, 23-25
 weighing, 22, 28, 33, 102
 Values, human, 9, 21-29

 Values, analyzed and defined, 21
 listed, 24, 26-27
 role of attitudes in realization of, 26-27
 see also Goals
 Van Bortel, Dorothy Greey, 109-110, 112, 140
 Van Syckle, Calla, 408-409, 420
 Vedder, N., 161
 Vieg, John A., 77
 Vincent, Clark E., 91
 Viteles, M. S., 143

 Warren, Jean, 102, 105-106, 108-109, 111, 415
 Watson, Maxine, 217
 Weaver, Elaine Knowles, 163, 166
 Weekly time patterns of farm, city, and employed city homemakers, 112-113
 Weiss, Gertrude S., 456
 Weitzel, Kathryn S., 91
 Weld, Harry P., 204
 Wheelchair homemaker, 192
 Whyte, William H. Jr., 308
 Wiegand, Elizabeth, 106, 108, 111-113, 148
 Wieman, H. N., 23
 Wilder, Josephine, 167
 Wiley, Elizabeth Weeks, 170
 Williams, Jennie, 483
 Wills, 260-261 
 Wilson, Maud, 117, 171-175, 413
 Winslow, C. E. A., 497
 Witty, Paul, 498, 503
 Woman's Foundation, 335
 Women with professional interests, 7
 Wood, Anna L., 396
 Wood, Mildred Weigley, 9
 Woodworth, Robert S., 49, 196, 198, 200, 203
 Woolrich, Avis, 415
 Work, physical, 11-12, 40, 100-101, in lives of women, 88-89
 Work curves, characteristics of, 142-146
 for finger muscles, 143
 for heavy muscular work, 144
 for light work, 145

Work curves, probable, of homemakers, 145-146
 stages of worker's output shown in, 144-145
 variations in shape, 144-145
see also Fatigue curves
 Work simplification, applied in the home, 157, 176, 191
 chart techniques, 156, 158-159
 definition of, 155-156
 film analysis, 156
 for disabled homemakers, 191-193
 goals of, 191-192
 motion and time studies, 155-157, 160
 Mundel classes of change, 177-191
 research in, 155-176
 rhythm and, 179-180
 Work simplification studies of home-making tasks, 157-176
 bedmaking, 157, 166-167

Work simplification studies of home-making tasks, cleaning, 157, 167-168
 dishwashing, 157, 161-164
 food preparation, 157-160
 kitchen arrangements and equipment, 157, 168-176
 laundering, 157, 164-166
 work surface heights, widths, and depths, 171, 173-176
 Working areas, normal and maximum, 178-179
 horizontal plane, 174, 178
 vertical plane, 174, 179, 391
 Wrenn, D. C., 500
 Wright, Florence E., 424
 Yochelson, 143
 Zimand, Savel, 497
 Zwemer, Evelyn A., 489

